# **Changing Faces, Facing Changes:**

# **Forensic Science in Search of New Horizons**

Thesis submitted for the degree of

Doctor of Philosophy

at the University of Leicester

By

Sarah Jane James BSc (Open)

School of Management

University of Leicester

2011

#### Sarah Jane James

Changing Faces, Facing Changes: Forensic Science in Search of New Horizons

#### **Abstract**

The focus of this thesis is a study of change in a public sector environment and the effect it has on that environment. It is a combination of an empirical study of the author's former employer, specifically the Police Scientific Support Department, and a critical analysis of the technique used to carry out the study and its application, Soft Systems Analysis.

The thesis is multi-layered through the additional use of a diary, which gives a more personal view of what the author experienced during the project, along with a third more clinical and critical review of the project and its outcomes through Actor-Network Theory. This allows the author to portray a number of different perspectives on the same reality. The author's position within the force as project manager, allowed comprehensive access in which to carry out detailed action research through at-home ethnography, unstructured interviews and documentary data collection.

A police force's forensic strategy and the way it conducts its business in order to provide a comprehensive service, offer value for money and work within a limited budget, is a complex process which is affected by many factors. Some of these include political issues over government finance, organisational issues surrounding staff levels and their deployment, as well as technical issues over available techniques, their success rates and how to make the most efficient and effective use of them. The case study covers a period during which the construction of a new Scientific Support single site is being carried out. Many departments are being moved to the new site, away from their city centre base, to provide a more comprehensive and extended service.

# Acknowledgements

The views expressed in this work are those of the author alone and are not necessarily endorsed by the collaborating force. The author would like to personally thank the force for allowing her to carry out the research during her employment with them and is extremely grateful for their support.

The author would like to thank Neil James, her husband, for all his patience and support during the researching and writing of this thesis, without whom, it would have been impossible to complete; her mother Joan for her continuous support and her best friend Sue, for continually asking the question "Is it finished yet?" so that it had to be in the end.

This thesis is dedicated to the memory of Michael Nekrasovas who sadly passed away in 2009, much loved and always supportive of the author and her work.

Contents		Page	
1.	Executive Summary	6	
	1.1 About the author	11	
	1.2 General context of the study – Public Sector Organisation	12	
	1.3 General context of the study – The Nature of Police Forces	14	
	1.4 General context of the study – Police Forensic work	18	
	1.5 Case Study overview	22	
2.	Literature Review	32	
	2.1 Prince 2	33	
	2.1.1 Starting a project	39	
	2.1.2 Initiating a project	41	
	2.1.3 Controlling a stage	43	
	2.1.4 Managing product delivery	45	
	2.1.5 Managing stage boundaries	47	
	2.1.6 Closing a project	48	
	2.2 On Soft Systems thinking and its relevance to the case study	51	
	2.3 Soft Systems Analysis	57	
	2.4 The Application of Soft Systems Analysis	68	
	2.4.1 Stages 1&2 – Expressing the unstructured situation	78	
	2.4.2 Naming relevant systems and building a picture of the problem situation	92	
	2.4.3 Stages 3&4 – Defining the roots and conceptual modelling	97	
	2.4.4 Modelling	103	
	2.4.5 Stage 5 - Making the comparison	106	
	2.4.6 Stage 6 – Deciding which the desirable and feasible changes are	109	
	2.4.7 Stage 7 – Taking action to improve	112	
	2.5 Actor-Network Theory literature	112	
	2.6 On comparing or otherwise Actor-Network Theory and Soft Systems Analysis	126	
2	Methodology	130	
<b>J.</b>	3.1 Research method and design	131	
	3.2 Organisational Ethnographic Research and Participant Observation	133	
	3.3 Police Ethnography	138	
	3.4 Critical Action Research	138	
	3.5 Ethics	142	
		142	
	3.6 Data objectivity and trustworthiness 3.7 The contribution of the thesis		
		147	
	3.8 Defining the scope for the study	148	
	3.9 Data collection & analysis	156	
4.	Project twelve month snapshot	160	

5. A Critical Review	223
6. Conclusions	244
7. Postscript: Project update	249
Glossary	253
Appendix 1 Full size copy of rich picture	261
Appendix 2 Copies of press release about police reform	262
Appendix 3 Website questions and answers	268
Bibliography	277

# 1. Executive Summary

This PhD thesis is a study of decision making and change in a fluid public sector environment. It is a combination of an empirical, reflective study of the author's former employer, specifically the Police Scientific Support Department and a critical analysis of theory used to examine the case study.

A police force forensic strategy is an extremely complex decision making process, which is affected by many factors. Some of these include political issues over government finance, organisational issues surrounding staff levels and their deployment, as well as technical issues over available techniques, their success rates and how to make the most efficient and effective use of them within a restricted budget.

In 2004, permission was granted within the case study force for the funding of a new scientific support single site from which to deliver the future forensic strategy. The new site was seen to be needed to be developed to enable the force to, not only, deliver the current strategy, but also to put the department into the limelight as a centre of excellence in the provision of scientific support. The expectation was for a site that could offer, not only the latest techniques, but also evolve to take on new techniques as they were developed in the future, which meant having flexible facilities and well trained expert staff that could be retained.

The move would involve the relocation of seven existing departments, located on three sites, into one, purpose built, scientific support site. The process would also

involve cultural changes in the departments and their handling of crime cases, and would therefore consist of a complex project involving significant change. In October 2005 the situation became further complicated when, just after the initial building phase began, the Government announced further police reform, including the decision to reduce the number of police forces nationally. Whilst a final decision on which forces would merge together was not expected until February 2006 at the very earliest, the building project continued and all of the plans were reviewed to assess the potential for managing an increase in workload of up to 100% to cover the whole region.

The overall timescale of the project, from conception to completion, would be three years, including a sixty-week on-site building programme. This research focuses on the central twelve months of the project. This period was chosen because at that particular point, permission would be granted to go ahead with the project and the change process would begin to be introduced to the staff. This key milestone marked the point at which the project moved from planning to the realisation of a physical manifestation. The case study, known within the force as the single site project, is focused on the development of that site to meet future needs and the delivery of the change process within the organisation.

The purpose of my research was to examine how a project management technique, a problem solving methodology and an organisational studies theory would shed light on project management and the handling of change.

At the commencement of the project, the author had little previous project management experience. Circumstances, however, quickly led to the author being elevated to the project management role. The force policy was, and still is, to use PRINCE2 as the principal project management technique, but a mismatch between the project and this technique with its limited focus on people, resulted in the author seeking an alternative technique to potentially encompass all aspects of the process. Soft Systems Analysis (SSA) was chosen and employed for the project in order to answer the following research questions: "Can a problem solving methodology such as Checkland's Soft systems analysis still effectively meet the requirements of a fluid public sector organization in managing change?" and "What additional insight can an organisational studies theory such as Actor-Network Theory bring to an organisations project management?"

In Chapter 1, the author will introduce herself and the case study organisation that she chose to examine. The force shall be known as Studyforce throughout the thesis to ensure their anonymity. In order to thoroughly understand the context in which Studyforce works, the author will also describe the wider environment, in which it is situated; that of the public sector and police nationally. In addition to this, as the case study is set in the Scientific Support department, she will also set the context of work within this specialised field by briefly discussing the history and nature of forensic evidence.

In Chapter 2, a systematic literature review of Soft Systems Analysis and its effectiveness will be carried out. This includes critical engagement with Actor-Network

(ANT) literature, Soft Systems related literature and a discussion as to whether ideas have moved beyond Soft systems analysis. Furthermore the project management method of choice for the force, PRINCE2, is explored in detail and in the context of the case study. During this chapter, it is also considered whether PRINCE2 met the needs of the project manager and the organisation.

Use of Soft Systems Analysis for the project is documented in detail and a discussion of its practicality ensues. It will be considered whether this technique would potentially meet the needs of the project any more successfully than PRINCE2, or whether a combination would more fully meet the project manager's needs. Finally, SSA and ANT are compared and contrasted.

In Chapter 3, the methodology used in this thesis will be discussed in detail, that of action research, and participant observation. Data collection and analysis for each of the techniques used on commencing the study – PRINCE2 and Soft Systems Analysis is discussed.

The scope of the study is set out. Policing and forensic investigation are national activities and the limitation of the study and those aspects covered by the thesis are fully clarified.

Finally, the contribution of this thesis to the field of Organisational Studies is proposed and discussed.

In Chapter 4, a twelve month snapshot of the case study is provided. It is described in two styles, firstly, the period as it was formally recognised by documentation and events, and secondly, in comparison, as a personal and informal experience via a twelve month diary documented by the author and project manager of the change process. These styles are separated by the use of two different font styles; the more formal section denoted by conventional text, in contrast to the diary section which is denoted by use of a script font resembling handwriting.

In Chapter 5, the case study period, use of the three methodologies and the response to my research questions "Can a problem solving methodology such as Checkland's Soft systems analysis still effectively meet the requirements of a fluid public sector organization in managing change?" and "What additional insight can an organisational studies theory such as Actor-Network Theory bring to an organisations project management?" will be reflected upon through the work of Latour and discussed.

Finally, the author will conclude by arguing that although all three techniques give the project manager and organisation useful insight and control over a project, none of them explicitly discusses how to deal with the change and reactions to it. It will be seen that Soft Systems Analysis, whilst comprehensive in its coverage, can be complex and time consuming, both of which aspects make it potentially slow to use and difficult in practice on a complex, fast moving project. PRINCE2, by comparison is an effective project management tool, which acts as a solid project framework, but neglects key aspects of a project; in particular the effects on people and the effects their reactions may have on a project. Actor-Network Theory can bring insight to a project to help

examine why it failed or succeeded and this can be used by an organisation to learn more about their processes and improve on them. By using all of these techniques on a project, a rich comprehensive snapshot can be gained of the project management processes within the organisation and how they really play out.

#### 1.1 About the author

At the time of the research, the author was employed as a member of police staff (and therefore not a sworn police officer) by a large metropolitan police force, as one of a number of Scientific Support department managers. She had worked for the police in various parts of Scientific Support for over fourteen years. In October 2004, she was managing a department within Scientific Support and placed as a project coordinator on the Scientific Support Single Site Project, for three days a week. The head of department, the Scientific Support Manager (SSM), was project manager.

It should be acknowledged at this early stage that the author had no significant previous project management experience at the time of appointment to this task and therefore under the guidance of the Scientific Support Manager who was an experienced project manager at a senior level, hoped to learn about the successful running and completion of a major project. No training was given at the commencement of the process, although Microsoft Project (™Microsoft Corporation) software training was given towards the end of the full project term to assist in documenting the schedule for the physical movement of staff and equipment into the new site. During the course of this study, she is referred to as either the project manager or author throughout, dependent on the context.

# 1.2 General context of the study – Public Sector Organisation

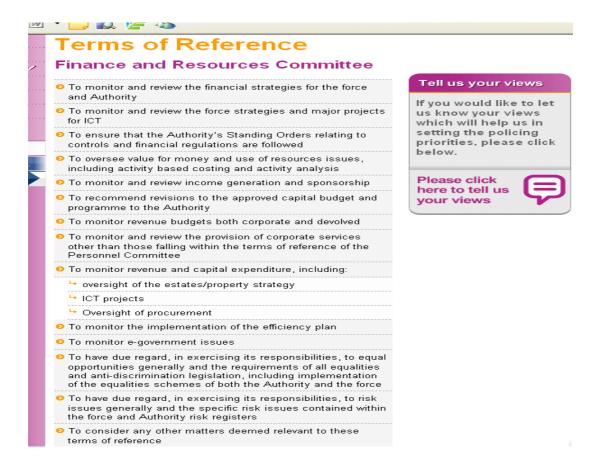
For illustrating this work, the author has selected a large public sector organisation as the case study. Studyforce, as it shall be known within the context of this work for anonymity, is a large police force in the United Kingdom and covers mainly metropolitan areas within its force boundary. The organisation is governed by certain legal criteria, which dictate its activities and also its national performance targets. Like all Public Sector organisations, this can mean that its overall aims and objectives will be reasonably stable, but its day-to-day priorities can change rapidly due to the political nature of the control over it. For example, the police force's overriding aim will always be the safety of the public, but the particular targets will vary with current political thought, e.g. the change from centralised policing towards the development of community policing and vice versa.

A change in government, or even of individual ministers, can potentially result in a 'uturn' on a decision that is already having a major impact on the way the organisation can ply its business. Clear evidence of this can be seen later in the study when the issue of regionalisation of police forces is discussed. After announcing plans to merge forces into specific regions, political pressure caused a reversal in this decision. One particular force, though not Studyforce, had even launched a legal challenge to the process. Ultimately though, it would be the issue of funding the changes that brought about the change of heart. Who would pay for the re-organisation and the re-badging of the individual forces?

The force, like all police forces in England and Wales is nationally reviewed by Her Majesty's Inspectorate of Constabulary and compared to other forces. It is subject to regional government control over the organisation via the local Police Authority.

The Government has established through law in the Police and Magistrates Court Act 1994 that it requires a local Police Authority, rather than the Chief Constable, to review all aspects of the police service in their area and the case study's Police Authority consists of 17 local people, made up of nine councillors, three magistrates and five independent members. Their main responsibility is to make sure that the force area has an effective and improving police service. Any major project will need to seek permission to proceed from the Police Authority, as part of the act makes explicit their responsibility for financial planning within the local policing plan.





Studyforce Police Authority Website 2011

# 1.3 General context of the study – The nature of police forces

Police forces are inherently hierarchical organisations, consisting of a top down structure. The Chief Constable at the top of the structure has ultimate responsibility for the force's progress in meeting its annual policing plan, as delegated to him by the Police Authority in line with the Police and Magistrates Courts Act 1994. He/she gives a centralised directive and via the rank system, the targets are filtered down. Constables at the bottom of the hierarchy receive orders and carry out their duties.

Although police staff (formally referred to as civilian staff), who are not sworn-in police officers, also form part of this hierarchical system, they are not required to follow orders without question, in the same implicit vein as police officers and are not generally considered to be part of the rank structure. There are exceptions to this at

senior management level, for example the Head of Human Resources is not a police officer, but holds equivalent rank to other department heads in terms of the overall force senior management team and would be expected to act accordingly. Within the day to day working environment, police staff are therefore often given more or less respect by ranking officers dependant on their role within the organisation. This incongruity was highlighted during the annual HMIC inspection of police forces in 2004 - Modernising the police force, which examined the role of police staff and how they were viewed and treated within police forces. It identified a 'them and us' culture that, whilst it was slowly improving, needed to be addressed by forces to get the best from the force resources. As a result of this, Loveday (2005) explored this inconsistency further. He found evidence that police managers have not seriously addressed the matter and indeed even HMIC themselves do not include work carried out by police staff in their annual reviews. Efficiency and effectiveness were linked solely to police establishment and did not extend to police staff. Further to this, Loveday also noted that "Antipathy to police staff exhibited at this level can be expected to be quickly picked up further down the police hierarchy and may explain the frequency with which HMIC identified negative perceptions among police officers of police staff" (Loveday 2005, p6). These comments were despite a move towards a more integrated police service.

The police force as a whole reflects Weber's model of rational legal authority or bureaucracy i.e. one that bases the legitimacy of its authority on impersonal rules and regulations (Weber cited in Linstead, Fulop and Lilley 2004). Although police officers have a duty or obligation to follow orders by nature of their sworn oath, almost like a

tribe as in the traditional type of authority, they are ultimately governed by laws, procedures and regulations. The regulations and procedures of the bureaucracy also affect police staff, but they are not so ensconced in traditional authority where customs prevail. Police staff vacancies are recruited entirely separately from police officers, using different methods. Police staff roles are advertised as job vacancies, whereas a role as a police officer is advertised as a vocation. The exception to this is the role of the Police Staff Community Officers, who do not possess full police powers, but patrol the streets and whose role is structured very similarly to police officers. Due to the nature of the role, they would be expected to act on order, without question, to ensure public safety and they have their predefined place in the rank structure, alongside serving constables. They are recruited in a similar manner to police officers, but as a separate intake of recruits.

These subtle differences in culture discussed by Loveday and Weber, may potentially become magnified in a project on the scale of the move to a single site; given that a senior police officer will have overriding control of the project at 'board level', but will invariably have little personal experience in managing police staff and the differences in culture. With the possible exception of the Information Technology Department (IT), which also has a police staff manager, all other groups within the study force are predominately composed of police officers.

Both IT and Scientific Support are comprised of technical specialists with administrative support. They work through a coordinated approach to provide evidence for police crime investigations and meet their own individual departmental

objectives. This use of police staff is not consistently replicated across all Scientific Support departments in every force. Some forces use predominately police officers in specialist departments as well as on the beat, although the national recommendation from the Home Office is to have as many police officers on the beat as possible, rather than diverted into specialist roles. Scientific Support staff have, by the nature of their work, enquiring minds and like to know the detail of projects so that they can give feedback to assist the process and come to terms with impending change.

Bureaucracies are often seen as negative, but in fact can give a certain security to staff due to the set nature and routine of work, which is governed by procedures and rules. We would argue from experience that in general terms, bureaucracy affords order and understanding to a role and therefore stability and structure to the organisations activities. One down side of bureaucracies is their reluctance for change. This could be seen to be due to the reduction in the general stability of the bureaucratic state. By reducing this sense of security, staff can be left with uncertainty and this could potentially increase the reluctance towards any form of change being made.

This thesis is specifically concerned with the work of the Scientific Support Department of the force. Scientific Support deals with all of the forensic aspects of investigations, after the scene of crime officers have recovered suitable evidence types from crime scenes. The various departments deal with photographic, fingerprint and other forensic evidence, examining the items, recovering fingerprints and other forms of trace evidence, along with coordinating the attempts to identify offenders from the results.

Weber would have seen Scientific Support as highly bureaucratic. Its day to day procedures are highly scientific and decisions are readily made using scientific know how to rationalize the process. The decision as to which crimes are examined and which crimes are tested are based on quantifiable previous success rates and not subject to favouritism or ad hoc decision making.

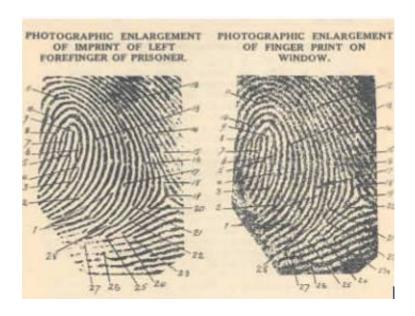
# 1.4 General context of the study – Police Forensic work

People's understanding of forensic science is currently heavily influenced by television programmes such as 'CSI, Crime Scene Investigation' (©2005 CBS Broadcasting, Inc and Alliance Atlantis Productions, Inc.) and 'Waking the dead' (© British Broadcasting Corporation), which have made it seem a very 'glamorous' field to work in, and indeed it is! In our experience and through informal discussions with colleagues nationally, to be able to make such a significant impact on a case gives all those involved in the process a very real sense of job satisfaction.

Forensic science literally means science 'connected with a court of law' (*The Collins Concise Dictionary of the English Language, Second Edition*, London 1988) and therefore covers a variety of subjects and skills, archaeology, toxicology, fingerprint enhancement; the list goes on. Early usage of forensic science can be traced back to the 6<sup>th</sup> century when legal medicine was practiced in China (White 1998), but other types of evidence, such as the study of poisons (toxicology) did not develop until the 18<sup>th</sup>/19<sup>th</sup> century when much of modern day chemistry was evolving (White 1998). This is despite poisoning itself having a considerably longer pedigree!

Fingerprints have been used in criminal cases since the latter part of the 19<sup>th</sup> century, but the full potential wasn't realized until the introduction of Sir Edward Henry's classification scheme which provided a structured and consistent approach to the cataloguing and retrieval of fingerprints (Henry 1934).

Henry's system allows discrimination between individual fingerprints using patterns and characteristics. Firstly, the general pattern of a fingerprint is used to group similar types, these might be loops, whorls or arches. These are then further subdivided by characteristics within the group e.g. the direction of the loop or the shape of the arch. Finally, individual ridge characteristics are used to separate the fingerprints further. Fingerprint identification can therefore be gained via a sort of 'spot the difference' in reverse! This can be seen more visually in Diagram 1.



**Diagram 1: Comparison of Inked and Recovered Fingerprints (**South Wales Police 2009)

The use of deoxyribonucleic acid (DNA) in identifying offenders was a late starter, by comparison, being first developed in 1984 by Sir Alec Jeffreys at the University of Leicester and used for the first time in the successful conviction of Colin Pitchfork for murder in 1987 (Townley & Ede 2003).

As early on as 1840 the issue of contamination of evidence was introduced during a poisoning case when M P Orfila, a Paris physician, testified that the exhumed body parts he had examined contained arsenic, which could not have come from either his laboratory or the cemetery soil (White 1998). Contamination of forensic evidence is still argued today, particularly in respect of trace evidence such as DNA, fibres and hairs, where secondary transfer can occur; that is, where evidence can be passed from one scene to another or one item to another. This is discussed further in section 1.5 in relation to force work practice.

The single most important basic principle of forensic science is credited to Edmund Locard, who in 1910 stated that 'every contact leaves a trace'. This is not only true in relation to linking people to places and crimes, but also in linking items to people or places. So by our very presence at a location, or by our handling of an item, we will have left some evidence of that fact, be it fingerprints, hairs or perhaps fibres from our clothes. This is, of course, dependant on a number of circumstances. Some donors are very poor and leave little evidence of bodily matter; some materials do not shed excessive fibres e.g. plastic jackets, plus preventative methods can also be used to affect the depositing of evidence e.g. wearing a pair of gloves to cover the fingers up.

The overall picture of the evidence from a crime scene is then complicated further by the interaction of the various evidence types and how together they weave potential sets of circumstances to describe what has happened. Forensic evidence is as much about proving a suspect's innocence, as their guilt. It can tell us as much about the truth and honesty of their description of events, as it can highlight gaps and omissions in their dialogue.

The logistics of forensic examinations within Scientific Support are complex. Processes must be considered and carried out in strict order, as one may destroy the evidence produced by another. All evidence has to be accurately recorded at each stage, therefore, for example, in the case of fingerprints being developed by a sequence of chemical treatments, the item goes through an iterative process of examination, photography, treatment, examination, photography, treatment and so on until the process is complete. Add the potential contamination of other forms of potential forensic evidence such as DNA and fibres in the process and it can be seen that each individual examination should be carefully considered in respect of the whole gambit of processes and evidence types potentially available.

Overshadowing this process, is the other overriding need of the department; getting the best value out of the process. The national allocation of funding will reflect local crime figures, force size i.e. number of officers in respect of pay and then other finance added for specific national initiatives e.g. the DNA expansion programme which funded additional DNA samples of offenders charged for more routine crimes. This helped to

expand records held on the national database. Prior to the funding, only those convicted of serious crimes could have their DNA profile held. The new funding and legislation changes allowed profiles of those convicted of lesser offences to also be held long term (this has already proved beneficial in solving a number of unsolved serious crime cases where offenders have been sampled after minor incidents and identified against major unsolved crimes on the database), but there is always a tension between the funding available and the number of crimes that the expenditure can cover. The cost of many specialist forensic techniques is disproportionate to the value they bring to an enquiry. Virtually every crime type will yield potential forensic evidence, but with limited funding it is not always cost effective on more routine crime types to use expensive processes. This is further weighed up in respect of the bigger overall picture of crime in the area, for example a prolific burglar may be feeding a drugs habit and after investigation may lead to figures higher in the drug supply chain, therefore it may be worth spending more forensic time on the original crime in order to inform the bigger picture. Each individual crime has to be reviewed to judge its seriousness against the potential value in the overall work of crime reduction.

Which evidence types are most likely to yield results on particular materials, the seriousness of the crime and the cost of particular examinations will all have their part to play in the decisions around the forensic examination of a crime scene. It should be pointed out that all potential evidence sources will be removed from the scene in the first instance and stored appropriately. A decision will then be made around the level of examination that will be undertaken. In that way, an informed decision can be made about the circumstances of the case without compromising potential evidence. After

obtaining more information through interview, the best exhibits for examination can be selected.

### 1.5 Case Study Overview

"(Building name) is the realisation of a dream. Our forensic capabilities are respected countrywide and this centre of excellence will continue to take us from strength to strength"

Scientific Support Manager, Studyforce, force Newspaper February, 2007, Front Page

As stated earlier, at the study's commencement in 2004, Studyforce is a large police force in the United Kingdom with approximately 11,500 staff including over 8,000 police officers and almost 3,500 police staff. It is a metropolitan force area and is home to over 2.5 million people. The force area is divided into a number of operational command units (OCU) and further divided into sectors to deliver focused community policing at a local level. (Sourced from the Studyforce website, 2005)

The Scientific Support department is a centralised department and consists of 133, almost exclusively police staff employees, divided into fourteen smaller units, delivering specialist services to the whole force. These consist of a fingerprint bureau, a photographic department, a CCTV unit, a DNA bureau, a fingerprint enhancement laboratory, a scene of crime training unit and a scientific support intelligence unit containing analysts, a footwear database and the Central Submissions department, who control and manage the authorisation process for forensic samples to be submitted to outside forensic agencies. There is also the department controlling the

force's input to the Police National Computer and a criminal records bureau, which deals with enquiries for security checks on new employees. Finally, there is also a resident Coroners officer dealing with liaison between the force and the Coroners office. The departments are located on three separate sites within the force area. Although most of these departments can run independently, their products are often either the input to one of the other Scientific Support departments or inter-related via the same cases, with those of others. As can be seen from the description of forensic processes in the previous section, the geographical fragmentation of these departments is not conducive to the required communication links when considering these multi-evidence type examinations. Individual departments are forced to carry out their work in isolation resulting in a single-minded approach with little, or no, consideration of alternative forensic options. In addition, this does not reflect an overall best value approach to the over-riding cost of the forensic examination. The disparate locations also give rise to duplication of some facilities e.g. photographic equipment and services are located on two sites, within both the Photographic Department and the chemical laboratory where fingerprints are photographed. (DCI Scientific Support 2001)

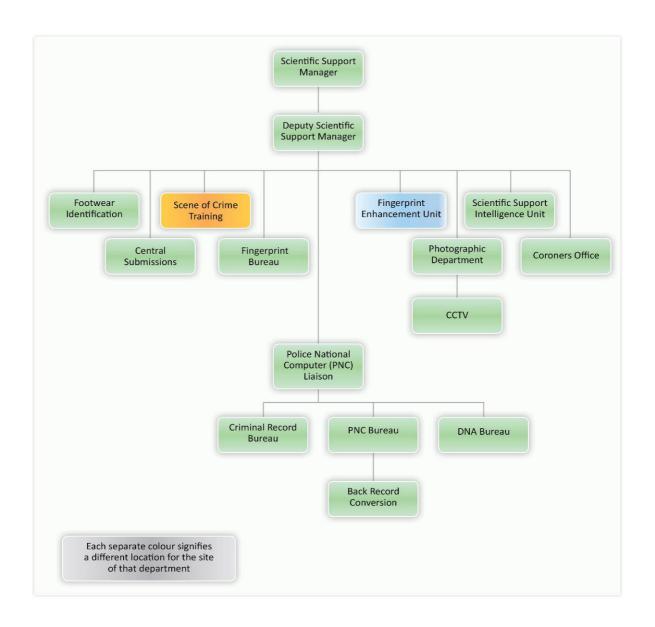


Diagram 2: The structure of Scientific Support at the commencement of the project

The field of forensic science is developing rapidly and the possibilities are potentially endless. As this thesis is being written up, for example, innovative techniques in forensic identification have recently been developed once again at the University of Leicester. Dr John Bond, Scientific Support Manager of Northamptonshire Police has recently completed a research project on the development and identification of fingerprints from people who have handled firearms cartridges prior to them being fired. Current techniques have not enabled this to be carried out very successfully in

the past. As the technique is based around the fact that the metal cartridge will corrode once handled, it can be used even when an attempt has been made to wipe the fingerprints off (*University of Leicester Graduates' Review Spring 2009*).

At Studyforce, the Scientific Support Manager and his senior management team are required to produce a forensic strategy to demonstrate how they are to make best use of the technology given limited funding. This strategy is based around the local policing plan issued by the Police Authority and the *Science and Innovation Strategy 2005-2008*, published by the Home Office (current during the project period, but revised periodically). This document sets out the strategic objectives of the Home Office in science and technology, and promotes continued investment in these areas. It covers a wide range of expert areas such as drug analysis, offender tagging and biometric identification as well as forensic issues, which are covered under the wider umbrella of identity management.

For some years, in a number of publications and annual reports, including the annual government inspections made by Her Majesty's Inspectorate of Constabularies (HMIC), a need for a central scientific support site in the Studyforce area had been identified.

A revised business plan for a unified Scientific Support Unit was submitted by the Scientific Support Manager in 2001 after a recommendation was made in the Best Value Review of Scientific Support compiled a few years previously (Home Office 1997). The document requested the co-location of all scientific support departments on one unified site to promote good practice and increase the effectiveness and

efficiency of the department. This gave increased weight and impetus to the need for a new facility.

In early 2004 the senior management team of the force had taken some time away to consider, debate and develop a new three year vision for the force. Each department debated the structure and service delivery that would be provided by them during this period.

The result of the Crime Support discussion was a ten page document called 'The Way Forward' documented by the Scientific Support Manager. Common themes were discussed that were relevant to all departments e.g. training, staff resilience and other issues, accommodation being one of them. Once again, the suitability of current accommodation was discussed, as recommendations for a central site, co-locating all of the forensic departments had been made since 1994 in various HMIC reports. Initially, the suitability of the accommodation was criticised due to its age, for example Victorian facilities not having been designed ideally to house modern laboratory facilities. Now it was being identified additionally that co-location would provide a more streamlined service by avoiding duplication of function and the time wasted by transporting exhibits from location to location. The latter also has legal implications, as the location of an exhibit must be known and recorded at all times in order to establish 'continuity' and remove the implication that an exhibit may have been tampered with or 'contaminated'.

In respect of forensic evidence, and indeed all recovered evidence, continuity is the continuous recording of the location of evidence, including who examines the items and what they physically do to those items. In this way there is no implication that the items have in any way been tampered with by anyone and that the items have been in the possession of the police throughout proceedings. By having departments on differing sites, this process is made more onerous as these items have to be securely packaged and the transportation recorded from site to site.

In mid 2004 permission was given by the local Police Authority to explore the costs and potential of such a building. This decision was recorded in their meeting minutes and relayed verbally to the Single Site Project Board (which had been instigated shortly before) by the Property Services Senior Project Advisor. The chosen site was an existing police station a number of miles from one of the local city centres.

Funding for the new Scientific Support site had been applied for via numerous methods, including national funding and partnership with other forensic providers, for a number of years. Spread over the force area, the three existing sites had been in existence for many years, provided when forensic science was a fledgling activity and limited space and resources were needed.

The laboratory site had originally housed only four people and limited techniques, but had grown within a three storey Victorian building to become a twenty person strong team, fitting techniques into available space. Large exhibits and drums of chemicals had to be carefully moved upstairs with the relevant lifting equipment, as there was no

lift present in the building. The structure of the building made installing one unlikely and cost prohibitive. The floors were solid concrete, a number of inches thick and therefore to excavate these and maintain support to the structure would mean an expensive task that would prove to be fairly temporary, as the accommodation would still be deemed as unsuitable to develop the service any further. A new, ideally single storey laboratory was needed to improve the service delivery, as spreading out processes within the building meant that large amounts of time were wasted in physically transporting exhibits around the location. As mentioned above, this also meant additional bureaucratic, manual recording systems to keep track of items. A number of the Scientific Support departments were also located in prime office space within the headquarters building and this was not deemed acceptable by the force, as space was limited, expensive and should be housing essential, corporate functions, such as the Finance and Personnel departments. This building is amongst a number leased by the force within the city and it was also considered that by moving specialist departments out of the city, the number of leased buildings could be reduced, therefore reducing overall long term costs and improving the force's value for money.

Although the chemical laboratory was not within the city centre, the department had grown to take up the majority of the building and a further expected benefit of a central site, would be the sale of this site to offset against the capital outlay that would be incurred. As this review took place prior to the current economic downturn, the force has since been unable to realise these assets and still own the site. Many forces

are currently delaying further phases of construction work due to the reduction in the funding they have been able to realise through the sale of land.

Finally, the Scene of Crime Training department had been relocated to an old police house near the outskirts of the force area, as this was the only location where accommodation was readily available with a garage for the training vehicle, which is forensically examined regularly by trainees. Unfortunately, the accommodation was small, limiting the class size available for training courses to four candidates at a time, maximum, and located on one of the extremities of the force area and therefore generating inefficiencies in terms of loss of manpower through extended travel time to attend courses, particularly for those Operational Command Units on the opposite extremity of the force area.

As previously mentioned in earlier sections, all of these factors and the need to dramatically develop forensic services were identified by a number of scientific support managers over a period of years and the need did, at one stage, appear on the force three year plan, but then failed to materialise. The department continued to apply for permission to develop this opportunity and in 2004, was finally successful in gaining permission for the scoping of the exercise, the key efficiency gains being identified by the Scientific Support Manager in the Scientific Support Single Site Project Board background and business benefits briefing document being those discussed:

- Purpose designed centralised scientific site as opposed to fragmented units
- Improved modern and purpose built laboratory conditions incorporating anticontamination facilities

- Centralised management and administration
- Full integration of departments
- Better communication flow
- Improved opportunities for technology to reduce duplicated and unnecessary functions
- Opportunity to expand in-house forensic services
- Cost savings through release of prime office space in the city centre and other redundant buildings

To put into perspective the importance of the project to the department and as importantly, the Scientific Support Manager who 'championed' the case for the new site, the author has included the following passage from the briefing document issued to the project board by the Scientific Support Manager:

"The world of Scientific Support is an ever-evolving process driven by new scientific developments and enhancements to current techniques. It is essential that the force puts itself into a position to embrace these required developments in order to maximise the contribution of science to the overall effectiveness and efficiency of crime investigation"

DCI Scientific Support, Studyforce, Single Site Project Board Briefing Document, 2004, p2

The instigation of the single site project and the department's progress through the change management process are the basis for this case study.

#### 2 Literature Review

The perception of theoretical research is that of stacked up books and a cosy armchair, but this is a very restricting and blinkered view, as it does not allow theory to occur anywhere else, particularly in peoples everyday lives and activities. "Theory is a way of seeing and thinking about the world rather than an abstract representation of it. As such it is better seen as the 'lens' one uses in observation rather than a 'mirror' of nature" (Rorty in Alvesson and Deetz 2000, p37), Theoretical research is founded in the examination and critique of the work of fellow authors or just as easily in the observation and debate of anything, anywhere. It may encompass paradigms, theories or metatheory. It is not the act of debating or observing that is theory, but the subsequent evolvement of concepts.

In order to examine the use of PRINCE2 (Projects in Controlled Environments, trademarked to The Office of Government Commerce) and Soft Systems Analysis, one must first set the scene with a brief description of basic systems theory itself. Systems thinking is based on the premise that we might consider how things work as a whole, the bigger picture and how varying facets might effect other facets of each system or other systems. Problem solving through systems thinking attempts to appreciate all these underlying issues and aspects in order to devolve a more comprehensive solution to the problem and give clarity to a situation.

PRINCE2 and Soft Systems Analysis are two different methodologies predicated on this theory. While PRINCE2 attempts to bring order to the project system, Soft Systems

Analysis examines the problem system and investigates the ways in which a solution might be sought that benefits the system as a whole.

The preference and policy of Studyforce, the case study organisation, is to use PRINCE2

as the project management tool. PRINCE2 is a project management method covering

#### 2.1 PRINCE2

the organisation, management and control of projects and has been widely used in both the public and private sectors. It sees its processes as the minimum requirements for a properly run project. It is a process based approach which is focused on specific products to meet the requirements of a specific business case (OGC 2005).

The decision to use this methodology was taken by the force in 1997 when a HMIC inspection (1996/97 Primary Inspection, recommendation 5) recommended that the force develop a systematic approach to the management of its projects. During the same year, the force local policing plan stated that any organisational change should be project managed, further reinforced by the Chief Constable's belief that by adopting a project management philosophy, the force would be building quality into the management of change (Project Support 1999).

"Policy

All business projects in the Annual Business Plan will be controlled as described above [Prince 2 process].

Project Support will be available to support/facilitate project meetings and additionally may take on the Business Assurance role in any Project Assurance Team.

The role of Project Support will be agreed at the setup stage of all projects."

(Managing Change: Project Management Guide, Studyforce Project Support 1999 p17)

The Association for Project Management also identify in their body of knowledge the benefits of a formal method of project management, such as PRINCE2 to give a consistent framework, within which project management can be performed via procedures (Association for Project Management 2006). In response the force developed a Programme and Project Support Section to assist managers in this process and it was this department that developed and issued the guide quoted above (Managing Change: Project Management Guide, Studyforce Project Support 1999). In addition some guidance was made available on the force intranet. This guidance is very comprehensive, including force orders and flow diagrams for clarity, although in the guidance there were no timescales associated with the delivery of the individual aims of the procedure e.g. within how much time the project initiation document should be compiled in. Each new project has a support officer allocated to give guidance and ensure that force policy is followed. Further to this, a senior officer is allocated to ensure that the project has momentum and is in line with the overall needs of the force. These senior officers are also programme managers within their specific areas e.g. in this case the Crime portfolio, in another, the Criminal Justice portfolio. This also ensures that they are in touch with each of the projects within their programmes, to maintain overall strategic management of them.

PRINCE2 was developed by the Government and is owned and maintained by the Office of Government Commerce (OGC). It was originally envisaged as the preferred standard approach to information technology projects, but was further enhanced and developed into a more general project management system. Although excellent for organising the more practical points of a project or problem, OGC openly admit that PRINCE2 does not explicitly cover the interactions between the elements of an issue or the social effects that change may bring (OGC 2005), citing the fact that it considers other existing proven methods are available to cover these issues along with other areas, such as leadership, quality management and budgetary control. Therein lay the first issue for the project manager of this case study.

Change is a way of life for many organisations, including the police and PRINCE2 was developed embodying many years of good practice in project management. Its focus as a technique is on the business case which forms the bedrock of the project and the justification for its instigation. All of the processes within the methodology are driven by the business case.

PRINCE2 has been developed to be used on any project and in both the public and private sector and, like all project management methods has the benefit of providing a repeatable method for projects that can be taught to a number of project managers to ensure consistency across the organisations projects, i.e. across its whole programme. It also offers an early warning system when problems develop and encourages the project team to be proactive in order to prevent problems arising. It consists of a

number of processes that can be tailored to each project by asking the question "How extensively should I be using this particular process for this project?"

The process very much reflects the organisational structure within the police, which is hierarchical and it places a rigid structure on projects, by breaking the whole process into eight defined sections and their associated procedures:

"Starting up a project", "Directing a project", "Initiating a project", "Controlling a stage", "Managing product delivery", "Managing stage boundaries", "Planning" and finally, "Closing a project"

These stages form the lifecycle of a very specific plan to produce a defined set of outcomes for the project.

Although there are methods to cope with deviations to this structure e. g. through error and risk logs, the process does not try to identify these aspects of a situation other than briefly in the original project plan. It leaves the project manager or their organisation to decide which techniques may be used to fill these gaps. This can be daunting for a new project manager and it was this positioning of the process that led to use of soft systems analysis as an attempt to encompass a more comprehensive set of social issues during the project.

In the case study organisation's project management guide, the common causes of project failure are identified as:

"

- Poor co-ordination of resources and activities
- Poor communication resulting in products which do not meet user requirements
- Poor estimation of costs and duration, resulting in projects taking longer and costing more than expected
- Poor planning of resources, activities and scheduling
- Poor control over progress
- Poor quality control, resulting in unusable/unacceptable products "
   Project Support, Studyforce, Managing Change, Project Management Guide, 1999, p3

It can be seen that all these aspects again relate to the physical aspect of the project and does not allude in any way to how other influences may affect a project within the force e.g. people and their feelings.

PRINCE2 is a process-based approach for project management. Each process is defined with its key inputs and outputs together with the specific objectives to be achieved and activities to be carried out.

The method describes how a project is divided into manageable stages enabling efficient control of resources and regular progress monitoring throughout the project. The various roles and responsibilities for managing a project are fully described and are adaptable to suit the size and complexity of the project, and the skills of the organisation.

A PRINCE2 project is driven by the project's business case which describes the

organisation's justification, commitment and rationale for the deliverables or outcome.

The business case should be regularly reviewed during the project to ensure the

business objectives, which often change during the lifecycle of the project, are still

being met.

According to OGC, PRINCE2 enables projects to have:

• A common, consistent approach

A controlled and organised start, middle and end

Regular reviews of progress against plan

Assurance that the project continues to have a business justification

Flexible decision points

Management control of any deviations from the plan

The involvement of management and stakeholders at the right time and place

during the project

Good communication channels between the project, project management, and

the rest of the organisation

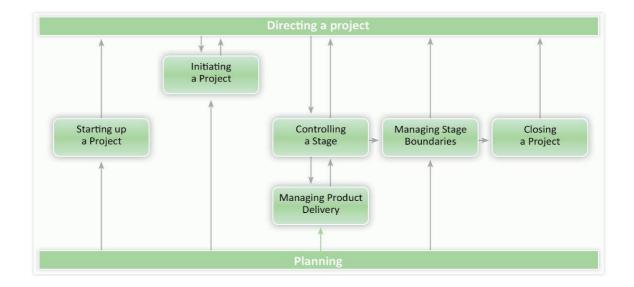
A means of capturing and sharing lessons learned

A route to increasing the project management skills and competences of the

organisation's staff at all levels"

Source: OGC 2009

38



**Diagram 3: The PRINCE2 Process Model** 

The following details of the PRINCE2 methodology stages have been extracted from *Managing Successful Projects with PRINCE2*, OGC 2005 and supplemented with text by the author, referring to its application within Studyforce. The extracted sections are notated using quotation marks.

# 2.1.1 Starting a project

"This is a pre-project process designed to be of short duration and to ensure that the project is worth starting.

This process is triggered by a mandate and is designed to establish the following:

- The design and appointment of a project management team, mainly a project board consisting of an executive, senior user and senior supplier.
- The preparation of a Project Brief (outline Business Case).
- Definition of the Project Approach covering how the product will be produced.
- Capturing and defining the customer's quality expectations.

- The creation of the risk log and initial risk analysis and management.
- An initiation stage plan covering the work to be undertaken in the initiation stage.

#### Products produced during this process are:

- The Project Management Team and associated agreed job descriptions.
- The Project Approach describing how the Final Product will be produced.
- A Project Brief (Outline Business Case) explaining the reasons project is to be undertaken and the justification for doing the project.
- A risk log identifying the initial risks identified for the project.
- An Initiation Stage Plan detailing the time and resources needed for undertaking the Initiation stage of the project. "

Much of this stage happened prior to the case study period within Studyforce. As has previously been discussed, after approval from the Police Authority was obtained, a Project Board was set up to monitor progress and give overall control to the senior management team within the force. Neither a risk log or initiation stage plan was set up for the Single Site Project. This was due to the lack of experience of the project manager coupled with the lack of supervision and support from the project support department. There was only one person within the department, who was therefore not available after the first project board meeting and offered no further support.

# "January 2005

As I have never been involved in a large-scale project before, I have arranged a meeting with the force's Performance Review Department who provide guidance on change and project management. I have now been introduced to the concept of PRINCE2, the project management process, very briefly

and been given a guidebook. The force has also arranged for me to go on a basic Microsoft Project course later in the year, but does not feel it would be cost effective to put me on an external PRINCE2 training course as I am likely to be involved only in this single project. I find this frustrating given the size of the project, but realise that there is a limited pot of training money to be shared across the department. This also concerns me due to my obvious lack of project management experience, particularly for one of this size."

# 2.1.2 Initiating a project

"The main aim of this stage is to produce a Project Initiation Document (PID) for approval by the Board along with a Next Stage Plan.

The main objectives of this process are to define the product quality and how it will be achieved:

- Produce a project plan to determine time and costs involved.
- Refine the Business Case ensuring that it remains acceptable and provides a firm foundation for the project to be based on.
- Ensure that the investment of time and effort required by the project is justified and takes account of all risks to the project.
- Ensure that controls are set up for monitoring progress throughout the project.
- Enabling and encouraging the Project Board to accept ownership of the project and agree the commitment of resources for the next stage plan.
- Provides a baseline for the decision making processes required during the project.

During this process, the main management product produced is the Project Initiation

Document (PID), which clearly defines the why, who, when and how of the project.

This is produced in addition to the Next Stage Plan and together they are submitted to the Board for a decision on whether to authorise the Project and proceed with the next stage work.

Other products created and ready for use when the project commences are:

- The Quality Log
- The Issue Log
- The Lessons Learned Log "

A project initiation document had been prepared by the Scientific Support Manager prior to their absence from the project, but to the project manager's knowledge, a quality log, issue log and lessons learnt log were not prepared during the course of the Single Site Project.

One of the reasons for this appeared to be the lack of commitment to the process.

During the initial stages of a project, it is expected that a project office be set up with sufficient staff to produce and manage such documents throughout the process, along with dealing with issues arising. This would be carried out under the leadership of the project manager. Unfortunately the case study project was set up with only the Project Manager to deal with such items and inexperience led to these not being instigated.

The project support office would normally be set up to be responsible for any administrative work needed, keeping everyone informed of progress, arranging

meetings, keeping plans up-to-date, chasing things up, keeping files, etc. and should something have gone awry on this particular project there is a risk that it would not have been spotted until it was too late to rectify. This was somewhat negated by the monthly project meetings, as issues were raised under a number of key categories and this led to considerable reflection by the project manager as to issues that may well have been raised on an issue or quality log, such as the availability of sufficient IT staff to install the department systems in a rolling fashion over a short period, thereby ensuring that all departments have a continuously live system at all times.

# 2.1.3 Controlling a stage

"Each stage of the project needs to be monitored and controlled by the Project

Manager. This part of the process describes the day to day management by the Project

Manager of the Project. It covers getting the work done, checking progress and dealing

with issues.

# For each stage, the following cycle will be covered:

- Authorising work to be done.
- Gathering progress information on the work.
- Keeping an eye on progress and watching for change.
- Capturing and examining issues.
- Taking corrective action on issues if required.
- Escalating issues to the Project Board if required.
- Review the progress against the Stage Plan.
- Reporting to the Project Board on Stage progress.

The continued assessment of risk and issues during this process is important.

Other products produced during this process on a cyclical basis are:

• Work packages, detailing the products to be produced must be agreed between

Project and Team Manager.

Highlight Reports (time driven control) produced by the Project Manager, sent

to the Project Board advising on progress information.

Project Issues and Issues log in which all issues are captured and examined.

Updated Risk Log.

• The Stage Plan which is regularly updated with actual achievements.

• An Exception Report may also need to be created if an issue is forecast to

exceed stage tolerances. "

"Policy

Annual Business Plan projects will be risk managed as described in this guide.

Initial risk analysis will be carried out during project start up and refined during the

initiation stage.

A risk log will be created at project start up and included in the PID. It will be

maintained during the project and should be reviewed as a standing item at progress

meetings."

(Managing Change: Project Management Guide, Studyforce Project Support 1999: 17)

44

As this stage was completely within the control and remit of the project manager, the majority of these issues on the Single Site Project were dealt with effectively, excluding the stage plan which had not been initiated and therefore was not available for updating. Issues were monitored and any exceptions or issues raised at the monthly project board meeting. At this stage the project manager had already begun to use Soft Systems Analysis and therefore had a secondary source of information in order to ensure that issues were being dealt with and any staff concerns addressed. We return to consider the experience of using SSA on the project later in this chapter.

# 2.1.4 Managing Product Delivery

"This process allows a controlled break between the Project Manager and the Team Manager who will be producing the products.

#### The main objectives of this process are to ensure that:

- The Team Manager will negotiate and agree the details of the Work Package with the Project Manager.
- The Team Manager must ensure that any work allocated to the team is authorised by the Project Manager.
- The Team Manager will ensure that the work meets all interface requirements identified in the work package.
- The Team Manager will ensure that the work is carried out and completed.
- Work will be assessed regularly and progress reported back to the Project Manager.
- Products are produced to meet quality criteria outlined in the Work Package.

Approval is gained for the completed products.

Products that are created or updated during this process are:

- Team plans with actual dates.
- Quality Log with all quality work that is being undertaken.
- Project Issues with status information and impact analysis for current or new issues identified.
- Risk Log updates with status information on current risks or new entries for new risks identified.
- Checkpoint Reports providing regular progress information to the Project
   Manager. "

The individual department managers within Scientific Support acted as team managers to coordinate the response for the Single Site Project. This is not strictly in line with the above specification, but with a number of departments on disparate sites developing new systems, this was seen to be the most practical way to gather the necessary information and ideas.

#### "March 2005

At the end of March final copies of the overall plans are issued to the department managers and officially released to the staff for briefing and consultation. There is now a strange atmosphere. The managers are quite positive about the move, but some staff are in a state of shock at the realisation that they will be moving away from the city centre. Where will they shop?!"

# 2.1.5 Managing Stage Boundaries

"This process will provide the Project Board with information that will enable them to make decisions on whether to continue with the project or not.

The main objectives of this process element are:

- To provide the Project Board with information on all products produced during the current stage and assurance that they have met acceptance criteria.
- By reviewing the Business Case, the Project Manager will provide assurance to the Project Board that the project continues to be viable and worthwhile.
- The Project Manager will provide an End Stage Report and Next Stage Plan in order for the Board to approve the current stage completion and start of the next stage.
- Lessons learned will be captured at the end of a stage, in order to help in later stages of the project or with other projects.

The main products of this process are:

- An End Stage Report produced by the Project Manager and given to the Project Board, outlining information on the current stage achievements.
- Current Stage Plan actuals showing the performance against the original Stage
   Plan.
- The Next Stage or Exception Plan for approval.
- A revised Project Plan incorporating all the actual metrics.

- An updated Risk Log, together with the Updated Business Case and Project
   Plan, which is used by the Project Board to review that the Project has
   continuing ongoing viability.
- An updated Business Case.
- The Lessons Learned Log.
- Any changes to the Project Management Team with updated Job Descriptions.

Team plans may also be produced when planning the next stage, defining the work packages that will be produced in the next stage. "

The Single Site Project failed to be divided strictly into stages, although every month, a report was given verbally to the project board and the continued viability of the project was considered by that board. In reality, it fell into some natural stages overall; preconstruction, construction, occupation etc. During the study period, there were natural breaks in the process, although these were not specifically marked e.g. clearing out the existing occupants prior to construction, completing the room data sheets etc.

# 2.1.6 Closing a project

"Every project should come to a controlled close. This process is to ensure that this happens and covers the work carried out by the Project Manager to bring the project to a natural close or bring to a premature closure should it be required. The work required during this process is to provide the board with sufficient information to obtain their confirmation that the Project should close.

The objectives of this process are as follows:

- To check whether all aims and objectives identified in the PID have been met.
- Assess to what extent all products have been handed over and whether customer acceptance has been received.
- Confirm that maintenance and operational arrangements are in place and if required any training provisions.
- Identify and make recommendations for future work required, possibly unresolved issues or risks.
- Capturing Lessons Learned.
- Prepare an End Project Report.
- Archiving the project files.
- Producing a Post Project Review Plan.
- Prepare a recommendation to the Project Board to notify the intention to disband the project organisation and release resources. "

A final project board meeting was held to confirm these issues for the Single Site

Project. The Assistant Chief Constable with overall responsibility for the project also

expressed his gratitude and congratulations as the project had run very efficiently

overall and the outcomes had been fully achieved.

"Policy

Individual project quality will be informed by the force's project management quality system.

Every project will be quality assured through the following:

Product based planning

Project quality plan

**Product descriptions** 

Every project will be quality controlled through the following:

Progress reviews

Quality reviews

Mid stage assessments (where required)

End stage assessments"

(Managing Change: Project Management Guide, Studyforce Project Support 1999: 17)

"In reality, there is only one support officer in the force and after the initial project board meeting he was not available for any further project board meetings and did not check any of the project work for compliance. The project did follow force policy, but without guidance and therefore missed so many of the above documents. Fortunately it does not appear to have been to the detriment of the project as it eventually finished without major issue, but so easily could have been. It is only after completion of the project that I find that I was required to produce a monthly report on the project. I did verbally update the project board at the meetings, and extremely thoroughly, but never produced a written report for them. The updates were recorded in the meeting minutes. In hindsight and now with much greater project experience, the thought of this situation horrifies me!"

It is in light of this poor usage and support for PRINCE2 that the decision was taken to use further existing management techniques for problem solving and change management, particularly as the project would involve the physical moving of

50

departments into a single building and would require changes to the relationships within these departments and how they dealt with exhibits. It would require a robust method of examining these issues to ensure that adequate resources were allocated and that these reviewed end user requirements could be met in a manner that improved the service.

PRINCE2 is a flexible methodology that can be adapted, but it was felt that people management skills would be invaluable to the process due to the physical relocation of staff. It was important to look at the whole picture and explore how individual elements interacted and therefore how the project may be affected in one area by the fear and reluctance of some staff in another.

As PRINCE2 is predicated on systems theory and it was a logical step to find other systems based theory to give more comprehensive coverage of the project.

# 2.2 On soft systems thinking and its relevance to the case study.

The best place to start any theoretical research is, as always, at the beginning, with Checkland's original work *Systems Thinking, Systems Practice*. In it he lays down both his hypothesis and the thought process behind its evolution. He also discusses the development of the systems movement. He uses a number of references in his text, including some of Optner's texts (the author whose system he initially applied in his action research), Habermas, a critical theorist in the Marxist tradition and Ackoff (five texts, including his 1957 book, *Towards a behavioural theory of communication*) and Vickers (five texts including his 1968 book *Value Systems and Social Process*).

In order to locate Soft Systems Analysis within the wider theoretical and conceptual framework, it is necessary to review the relevant organisational studies and critical management studies literature. Towards this aim, we will draw on texts from Checkland himself, Latour and actor-network theory in order to provide both a description of SSA and a critical appreciation of its associated techniques and practices.

A number of terms are used to describe Soft Systems: Soft Systems Analysis (SSA), Soft Systems Methodology (SSM) being two of them. During the course of this thesis, I will be using the term Soft Systems Analysis (SSA) in order to be consistent and avoid confusion in any discussion referring to the methodology as applied.

Soft Systems Analysis (SSA) was firstly developed by Peter Checkland in 1972. It is predominately the result of an unsuccessful application of classic systems engineering. Checkland was based at the University of Lancaster and whilst working within an environment that implied academic systems analysis was too far removed from practical problems, Checkland was involved in a programme of action research in real world organisations outside the university (Checkland 1981). He took Optner's concept from his 1965 book *Systems Analysis for Business and Industrial Problem-Solving*, that organisations could be seen as systems and sub systems and began work to investigate how the systems were formed and related to each other. Using the methodology of systems engineers, the research team found the real world problems too complex for a satisfactory application of these techniques and set about developing a more suitable methodology. Their biggest criticism of existing systems methodologies was that they

were predominately predicated on hard systems and did not consider the human elements of a system fully or understand the complexity of these affairs (Checkland 1981) Over the intervening period, the methodology has been further refined and much applied. Both *Systems Thinking, Systems Practice* (Checkland 1981) and *Soft Systems Methodology in Action* (Checkland & Scholes 1990) were reprinted in 1999 including a 30 year retrospective view on the development of the methodology.

Mingers and Taylor carried out a survey of SSA in practice and found that the biggest criticisms of Soft Systems Analysis are that it is too heuristic and leaves you with the problem of open endedness (Mingers & Taylor 1992). Where do you stop? How wide do you go and how diverse? This is discussed further at various points throughout this thesis, as it reflects some of the findings of the author when trying to decide what should and should not be included. One may consider a department and service in isolation, but it is never that simple, even when you isolate inputs and outputs. Other aspects will always affect aspects; policy, other services and the long term plans of other departments.

They also identified that SSA ignores power and is naive in that it expects everyone to be open and this may be unrealistic. Managers may not want to reveal all in order to reach accommodation. An example of this can be seen in the case study where only certain information can be released to certain people at particular times within the project (at the dictate of senior management). Despite our efforts to give inclusive communication of information, the politics and power within the department and force thwarted this.

Further to this, SSA does not define the best systems to examine, just helps to identify any number of systems that may have implications for the project or be affected by it.

It was the experience of the author that indeed it was necessary to study more than one system to ensure that the wider force affects could be examined.

One of the big positives from using SSA on a project is that it encourages commitment from those involved and brings things and people of a diverse nature together. It does fully highlight the multifaceted nature of system rationality (Mingers & Taylor (1992).

During this period, SSA and two further problem structuring methods became particularly prevalent and well used. The two alternative methods were Strategic Choice (SC) and Strategic Options Development and Analysis (SODA) (Rosenhead & Mingers 2001). All of the three have been further developed through practical use. Eden & Ackermann (2006) went on to surmise that most users of these and other methods only use parts of the whole and may in some cases combine parts from different wholes. Indeed they went as far as to suggest that such mixing and matching might constitute one way forward for problem structuring methods.

There has been much recent debate between scholars as to the extent to which they themselves and their conceptual apparatus have moved beyond Soft systems analysis (Mingers and Rosenhead 2004, Eden and Ackermann 2006, Checkland 2006 and Checkland and Winter 2006 and Petkov et al 2008). Moreover, there have been suggestions that full and more effective use of the methodology requires its

combination with other approaches. For this thesis, this is particularly pertinent in respect of change management within organisations.

Checkland himself entered the debate (Checkland 2006) by suggesting that problem solving techniques, such as SSA do have a place in the future, because they allow the use of other hard and soft techniques under the umbrella of their methodologies in the cause of 'sense-making' in problem situations. This makes them adaptable and capable of evolving to meet future needs. Checkland suggests two potential ways of getting the best from the technique, developed over thirty years of action research in real world problems (Checkland 1981). The first, the traditional use, examines the content of the problem situation, the second the process of the intervention. By reflecting on who is the 'problem solver' and who is the 'problem owner', an analyst can use the methodology to consider ways in which to address the intervention itself and how it might be reacted to. We consider this to make the political negotiations within each situation clearer from the start of the problem solving e.g. within the case study a number of departments are involved and they along with the force, will potentially have their own agenda. This may be to gain more resources or more space within the building or any number of potential considerations, but by looking at who the problem solver(s) and owner(s) are and will be, it is possible to focus on them and examine their needs and motivations rather than entering the situation blind and working closely with those who have no influence over solving the problem situation.

Using this method it could be seen that it was in fact a party outside of the department that held the most significant power over the project and who indeed did have other

priorities that clashed: the Finance Manager. At the time of the project, another project was ongoing within Crime Support which drew heavily on their attention and resources and it was to them that the focus needed to be given in order to ensure a smooth implementation of the project. Key timings in terms of capital spend needed to be met and prioritised at a time where the focus was elsewhere and it was therefore down to the problem solver to ensure that these deadlines remained in sight of the Finance Manager and were met. There was a similar situation with the Personnel Manager, as the other project also involved large numbers of staff.

Further to Checkland's comments on pluralism above, a number of further ideas have been debated by authors such as Jackson (2000), Mingers (2005) and Key and Midgely (2002). Petkov et al (2008) cites three systemic interventions in the South African IT sector where soft systems analysis was combined with other approaches. Habermas's three worlds view (the material, the social and the personal) were used to select the other methodologies (Habermas 1984). Petkov et al (2008) conclude that a general problem solving framework is not needed, as a number of tried and tested methodologies can be used as the dominant organizing framework and supplemented by further suitable methodologies as needed.

Soft systems thinking is an interpretive approach that accepts that multiple perceptions exist in a situation and tries to make sense of the complexity in order to alleviate the problem situation. One of its advantages is that it encourages more participation from members within and around the situation and there is therefore an

assumption that this will lead to better agreements that are more likely to be implemented as they have been decided upon by consensus.

The author's chosen case study is formed from a complex decision making process and it was with anticipation that I envisaged testing the practicality of the methodology in such a currently topical situation. In one respect the project would be emulating Checkland's original direction by applying a currently accepted concept to a 'live' real world case study. Although there the similarity ends, the methodology he used was not originally conceived for use in that way, whereas the author will be applying Checkland's own methodology revised after it had been further evolved to meet these particular needs, which is seen as very much appropriate for this situation. What may be significantly new to this application is the seemingly continuous change occurring in modern organisations and the speed at which it occurs.

#### 2.3 Soft Systems Analysis

My initial interest in Soft Systems Analysis was developed from having used it in previous study for my BSc (Hons). I found it to be extremely useful as a way of capturing a complex picture in order to tease out the real issues that may need resolving.

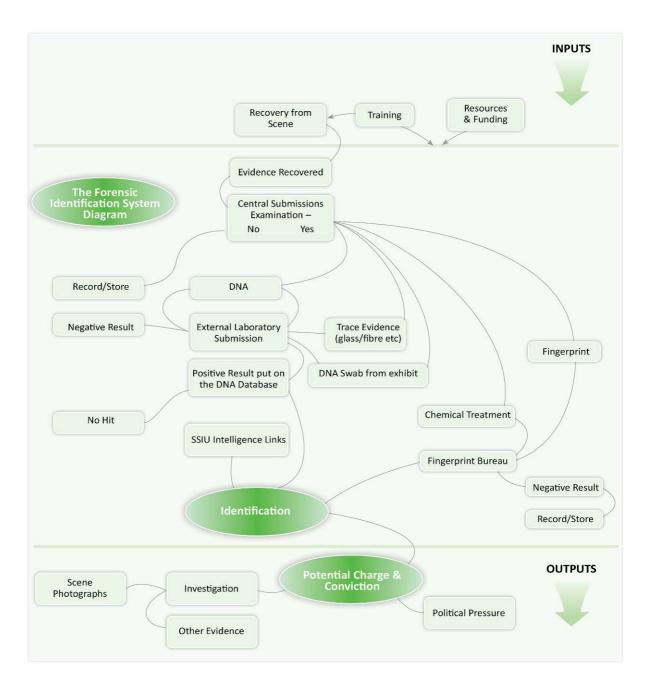
Soft Systems analysis is a method or approach to tackling a problem. It tries to take into account all aspects of the situation, including the social and environmental aspects. Unlike the more rigid PRINCE2, the approach attempts to examine the

interactions between the different parts of the problem, or system within which it resides.

There are a number of types of systems in existence, including natural systems, designed systems and social and cultural systems. Natural systems occur naturally in life e.g. the water cycle of evaporation etc. Designed systems are manufactured e.g. new technologies and social and cultural systems are formed through social interaction e.g. clubs and committees.

This case study problem situation is a human activity system. Human activity systems are usually open systems due to the unpredictability of human nature and the lack of control over this within the system. The problem lies within a particular human activity system and how you move through change in order to deliver a new service at the new facility.

The system on which this case study is based is 'The forensic identification system' and covers all of the departments in Scientific Support. Their primary functions are not necessarily to make forensic identifications, but all of the work is part of the system in which the identifications are made. This system can be seen documented by the author in Diagram 4 and has clearly defined inputs and outputs. The former being potential evidence gathered from scenes along with resources and the later being reports about whether identification has been made, for potential use in legal proceedings. The resources and funding are input from the wider community, although set aside specifically for that purpose and managed by the Scientific Support Manager.



**Diagram 4: The Forensic Identification System Diagram** 

It can be seen that individual departments form subsystems, such as the Chemical laboratory, which takes some of the evidence submitted, carries out its internal processes, and outputs photographs of fingerprints as inputs to a further sub-system, the Fingerprint Bureau. The laboratory's internal processes can also, in turn, be broken down into subsystems, each receiving inputs and returning outputs to further stages in

the process of producing the fingerprint photographs, for example chemical treatment, then examination using a specialist light source and then photography of the results. This process is also iterative and therefore can be complex in its own right even before moving up to the complexity raised by multiple evidence types, legitimate access (genuine, non criminal reason for finding this evidence within a crime scene) and expert evidence.

The forensic identification system has these subsystems formed by the different departments and interactions that are carried out to produce identifications. It then also forms part of the wider Studyforce system and part of the wider national and international police community.

Even by examining this system alone in detail and its interactions between sub systems and the systems environment, new insight can be gained. The sub-systems found in actual operation may not be those expected or laid down by the department and force structure. Soft Systems Analysis takes this further by comparing not just the ceremonial or presented view to reality, but also by comparing that reality with where the organisation wants to see itself once the change has been achieved; what the 'ideal' scenario looks and feels like.

The forensic identification system is fundamentally the processes on which the force forensic strategy is based and the funding spent. The department and national bodies such as the Home Office Scientific Development Branch keep a watching brief on new processes being developed worldwide that can be tested and brought in as another

subsystem, further helping to increase the number of successful identifications made and therefore potential convictions gained.

Soft Systems Analysis was developed with the view that managers and analysts alike aspire to find organised simplicity from chaotic complexity (Checkland, 1981). Soft Systems helps to discover the middle ground. It is aimed at clarifying problems, but not necessarily at finding solutions, as there are numerous existing techniques that can be used, once some clarity can be found in a situation. But this is also where some of the frustration lies with all of the techniques touched upon in this text: they each appear to promise to take us so near to a solution, yet in practice we seem to still find ourselves left an irreducible distance away from such. Each technique goes some way to managing the project efficiently, but there is currently no one method that encompasses all of the needs of a project manager. Each technique, and particularly SSA, appears to raise more questions than it answers and this can draw the user into believing that they are not making progress, when in fact, identifying the issues themselves is going a long way towards identifying solutions to them. The methodology opens up a whole world of possibilities, but then resists subsequent closure by not giving solutions or tools to assist in finding solutions to the situations arising.

The problem situations themselves are defined by Checkland as "any situation in which there is perceived to be a mismatch between what is, and what might, could, or should be" (Checkland in Patching 1990 p44). So using the example of the case study, there is not a problem (as in perceived difficulty) identified as the driver in this situation

(although the unsuitability of accommodation should potentially have been driver enough!), but a desire to improve and the opportunity brought about by the move, to reassess current relationships and processes, with improvement in mind i.e. a mismatch between what is and what may be perceived to be as a result of the move. In the sense of Checkland's methodology this is still a 'problem situation' and in addition to this there is also the risk that the move to a new building and change in procedures may not derive any benefits.

Hard systems can break down problems into little measurable parts and the desire is for this to give some order to the situation, but human nature is such that reactions to a situation can be different each time and unpredictable, therefore complex, too complex usually to fully unpack into component parts easily. Hard systems can be seen almost as a 'digital' conception as opposed to the essentially 'analogue' world of soft systems, ever changing and always essentially a snap shot in times and always poorer in content in the long term review because of it.

PRINCE2 is an example of a hard systems methodology. As discussed in the previous chapter, it is excellent for structuring and controlling the physical parts and outcomes of a project, but not for discovering those softer nuances that are potentially going to cause a project to fail. The complexity within the case study is caused in this case by, not only the physical move, but also the bringing together of different processes, the re-examination of their use and the social implications from this and those brought about by isolation from the city centre.

The technique is designed as an aid to the analyst rather than a panacea to solve all problems. People are not only unpredictable, but they also have individual, possibly unsolicited views and sometimes actions, that may influence a situation both overtly and covertly.

One of the differences between hard and soft systems is that relationships, such as social bonds, become apparent in soft systems that may be hidden from the facts and figures of the hard systems methodology. To get the best from the technique, a significant amount of time and effort must be employed to develop useful and insightful models. For analysts such as the author, who are employed by the organisation, this can reap long term benefits through a more thorough knowledge of the situation in general, as well as the problem situation being explored.

Patching (1990) argues that situations are not unique and could be used as templates across other situations or organisations, but in our experience, it can be seen that this is not necessarily so, other than as a basic framework. The level of depth needed in the modelling to make a thorough examination of the situation is predominately specific to that individual situation and a number of consultants can be seen to be trying to generalise on situations rather than looking at the individual issues. We ourselves carried out earlier research across three separate force's Scientific Support departments in similar sized comparative forces, and all three were significantly different in format, thought processes and culture. Patching suggests that e.g. industrial relations is the same in many companies and can therefore act as a template if looking at the industrial relations system in another organisation, but even though

police forces are governed using the same national agreements and legislation, in detail they are still intrinsically different due to the difference in the various human activity systems.

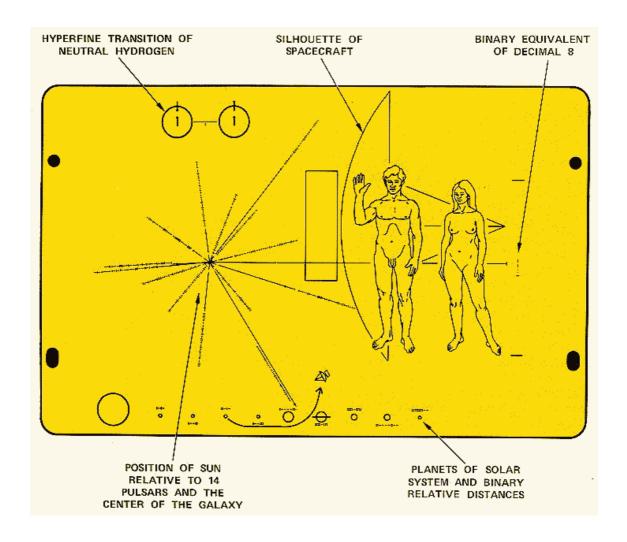
It could potentially be useful if the same system in a number of different bank branches or supermarkets were used, as the fundamental building blocks are literally duplicated nationally and would remain the same, whilst the surface activity such as numbers of customers varied. I do not intend this statement to imply that banking or retail components are any less complex than forensic activity, merely that some of the overarching activities can be replicated at certain levels and therefore partially agree with Patching's view on this subject. I suspect that most staff working in these fields would potentially disagree with me and I would agree that many processes in this field are likely to be as complex, or more so, than forensic science.

One of the advantages of the technique is the visualisation of the situation through a rich picture. It can be much easier to accept and visualise a concept with a visual aid, preferably more than one to help with the spatial aspects of a complex situation, e.g. the rich picture and plans or photographs. Each visual aid adds to the understanding of the whole picture. This could of course just be our personal preference, as everyone will have a preference of learning style and therefore preference as to the form in which they understand new projects and information, e.g. visually via diagrams or kinetically via experiments and practical application. This can ultimately be successful for all participants in the change, if pictures, plans, but also site visits can be planned

during the process, to enable everyone to understand the concepts being proposed by senior management.

A fascinating example of how pictures attempt to encapsulate knowledge was the Pioneer Plaque. In March 1972, a diagram called the 'Pioneer Plaque' was launched on the unmanned space probe *Pioneer 10*, travelling to Jupiter and beyond. The aim of the diagram was to show what humanity was all about and where to find Earth.

But how do you encapsulate that much information? What do you include and what assumptions can you make given that the viewer will potentially not understand human languages etc. The artists made the assumption (rightly or wrongly may never be proven) that science and maths are universal and therefore could potentially be understood by other inhabitants of the universe. The diagram, seen below, shows the plaque with two naked figures, a silhouette of the Pioneer 10 probe, the Earth's location in the universe and a measure by which this position can be calculated (BBC4, The Beauty of Diagrams, viewed 25<sup>th</sup> April 2011 via www.bbc.co.uk).



http://www.daviddarling.info/images/PioneerPlaque2.gif, accessed 27<sup>th</sup> April 2011

Can a scientific diagram transcend the written word? The design of the plaque caused much controversy amongst the conservative and feminist elements of America and some political aspects came to play on what should or shouldn't be included: female genitalia were left out and the features of the figures are drawn to be multicultural. Even after all the debate about shape, clothing and what should be included or not, these images may still mean nothing to another race that may look nothing like this.

The police world is target orientated and rather than focus on targets only, the project manager wanted to offer a more balanced approach to the situation. Although the targets are vital to meet for funding purposes and long term shows of accomplishment to the Police Authority, the move involves people and as such, needed a broader view. The soft systems analysis is tried and tested, as documented in Checkland and Patching, and claims to cover these issues; therefore it was decided to test this theory.

As has been mentioned, hard numbers can still be used as part of the measure of success in the building, but in order to implement change successfully, the people, environment and social issues needed to be explored fully, whereas the police attitude can be very simplistic: move these people into this building by this date and achieve these improvements in efficiency and effectiveness. This is a symptom borne of the attitude developed by the police structure. In the same way that soldiers follow orders, police officers do the same and although they are not necessarily happy about it, they have to comply unless it effects their rights, in which case the Police Federation negotiate to develop better rights. Of course a further course of action open to police officers is a form of 'work to rule'. If they are unhappy with orders, by following them to the letter, they can cause disruption to working practises. The differences between police officers and police staff has been known previously to cause conflict between what the organisation wants and what the staff want. This new building, however, is to be occupied by 99% police staff who do not have to follow these strict regulations and this will mean much more complex negotiations that need to be ongoing throughout the process. The situation needs to be handled delicately, as staff do not explicitly have to follow the order to move. There are a number of alternative options open to them.

There is, of course, still the implicit level of trust that is implied by the bond of employment and for some this is sufficient to ensure a move with no major issues other than nervousness over change itself. For others, the uncertainty over the changes will significantly affect their perception and handling of events.

# 2.4 The Application of Soft Systems Analysis

Soft systems analysis comprises predominately of seven steps, but these each contain a number of issues to be explored under a simple title.

# 7-stage representation of SSA:

- Stage 1 Expressing the unstructured situation
- Stage 2 Naming relevant systems and building a picture of the problem situation
- Stage 3 Defining the roots and conceptual modelling
- o Stage 4 Modelling
- o Stage 5 Making the comparison
- Stage 6 Deciding which the desirable and feasible changes are
- Stage 7 Taking action to improve

The fundamental principle of Soft Systems Analysis is to compare a real world situation with the ideal 'system world' interpretation of the situation, and considers not just the practical elements, but also the more vague people issues and influences of society on a situation. It does not constrain the analyst, but rather gives them freedom to use any

number of techniques to gather information in order to produce a rich picture of the situation and 'tease out' the issues. As can be seen in Diagram 5, like PRINCE2, the system sets out more of a framework on which to hang ones analysis by separating the 'real world' from the systems world in order to compare them and examine if the tasks necessary to reach the required state are actually occurring and if not why not, therefore offering a potential list of actions to assist in reaching the desired state. This separation between the two worlds is particularly important to the author, as it potentially allows an objective review of the situation without the encumbrance of more emotive issues. How you move forward to achieve the changes may well be a different issue altogether.

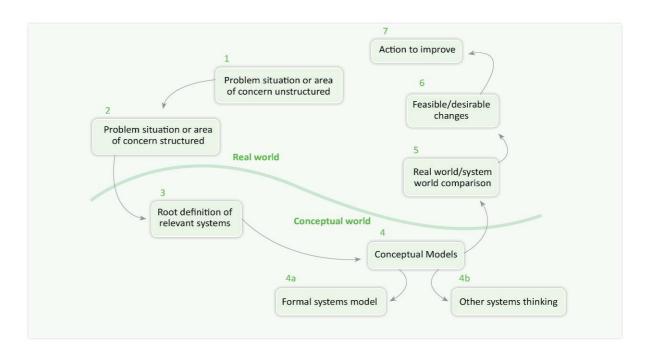


Diagram 5: Conceptual model of Soft Systems Analysis (Anon 2010)

Other than the general flow of the system, in the author's opinion, the technique appears only to be strict in the production of a rich picture to illustrate the situation, not in the techniques to visualise the current situation. This can be both useful, but

also confusing to new analysts using this system, as it does not define strictly a process to follow. (Footnote; As a new user, this was initially frustrating, but as the situation was looked at further, it was found that the freedom was useful to allow the picture to be fully investigated, rather than defining explicit steps.)

As a starting point to Soft Systems analysis, the problem owner needed identifying and this was quite difficult to settle on. It was initially thought that it should be the senior manager, but as I, the author was project manager, it led me to think that in some respects it should be me! I was the problem owner, as it was me who needed to manage the process professionally and needed the help in getting the 'what to do' question answered in order to fulfil my role (Patching, 1990). In this sense also, for the research, it is me, the author who has employed myself to carry out the research using this methodology, not the Scientific Support Manager, although he, the department and the organisation will all benefit from use of the process and the actions carried out as a consequence of it.

The unstructured problem was messy, particularly as some departments did not perceive they have a problem, but others had a tangible problem that could only be resolved with a move (again the laboratory is a building that would still not be suitable even after refurbishment due to the nature of its structure and restrictions on the type of remodelling that would legally be allowed).

A number of development meetings were organised during the process including an initial one to develop a 'vision'. This was done by department managers to form the

fundamental basis of the project and is fully documented later in the twelve month snapshot of the period.

Even though the author was a member of the department, the first stage of the process was a massive learning curve for her, not only as an analyst, but also in learning in detail what each of the other departments did. In the beginning, there was only a vague general knowledge of each of the departments' activities, but in order to carry out a detailed analysis, she needed to be able to discover much more about each area, including what was good and bad about the current site and how they would improve it, given the opportunity.

This in depth questioning of how processes and departments worked in practice did meet with some suspicion at first, as the managers did not want anyone to interfere with their area of business and make changes. After they had been reassured that this would not be the case and that it was an information gathering exercise to allow the 'bigger picture' to be documented and how departments overlapped, they were less resistant. Their resistance did not improve significantly until the first development meeting when a facilitator was used who had everyone developing a vision together as managers. They made the managers start to see that they, as a whole department, needed to do this together if the end result was to be desirable and look like the realisation of a coherent vision, whilst producing the best outcome for the organisation. This initial stage was difficult for the author as she was still partially managing the lab, but needed to do this from an overall perspective while the deputy within the laboratory took the lab manager's role in the proceedings — not ideal, but

only in the fact that it was necessary to try to focus everyone's thoughts and fully empower the deputy to fill their role and enable them to give an uninhibited opinion to the proceedings.

In addition to gathering information personally through the meetings and informal discussions, copies of department structures and national documentation were also gathered, which looked at shortfalls in the provision of service in this field and recommended best practise. Further to this, any relevant best practise documents held within individual departments such as 'Best practise at your fingertips', a report focusing entirely on police chemical treatment laboratories were obtained. These documents would feed some of the changes that may be expected of the department in order to be further developing the service or improve it where necessary. The laboratory once again was a prime example of this, as the location meant that a number of points could be addressed: joint darkroom facilities, which are currently duplicated within the Photographic Department, electronic transfer of digital images of fingerprints, which could not be made possible at the existing site due to the poor quality of the network and the substantial cost involved in making it feasible.

A further example of potential benefits to be gained was forensic strategy decision making on routine cases. Electronic transfer of photographic images was not currently feasible due to the time delays that would be incurred on a case moving items from the laboratory to other departments. Standard case examinations are made within one department, but items that require chemical treatment to enhance them need to be

examined at the laboratory three miles away first. The existing system was to deliver them separately to each department, with duplicated paperwork.

During this information gathering stage, the initial feelings about not wanting to move away from the convenience of the city centre were already being expressed.

Interestingly, this may have more to do with people's 'comfort zone' at this stage, as the staff located at poor facilities away from the city centre also expressed concern over why they should have to move. They also appeared not to want to leave a perceived 'comfort zone' despite the offer of much better, more friendly facilities in a location no different to their current location, albeit a couple of miles away. Public transport was not even a negative issue in this case as it was necessary for all staff to use their own transport and all had happily done so, finding it more convenient.

This is unlike the force headquarters where free parking was not available and public transport was abundant, therefore the culture was such that the majority do not use their own vehicle and objected to 'having' to do so. This was only their perception.

Public transport was available, but would add 30 minutes each way on some journeys and this was considered unacceptable additional travel by them.

This phase needed to be comprehensive as the individual department needs are physically quite demanding and the foundations of the process needed to be laid down securely to build upon quite literally!

At the beginning of the process it was believed that you could not have too much consultation, as having lots of consultation was deemed to develop a site that was

designed 'for the people, by the people' and therefore would not be such a huge surprise or so scary to people because they could get to know it in advance via their participation and a regular flow of information. But as the work progressed, staff questions were repeated and answers appeared to be believed less and less, e.g. at an early stage the number of parking spaces was raised as a concern and as the plans were not yet drawn up it was impossible to say that yes, everyone who needed to park at the site would be able to do so. Once the plans were produced and a survey carried out of those staff who would need to park their cars at the site, it was possible to say that the car park would be large enough to hold the numbers suggested. When this announcement was made at a staff consultation meeting it was greeted with suspicion. It had been said there would be a problem, so how could it be that there wasn't now a problem! Were the spaces going to be a reduced size, causing difficulty to those with larger cars? The staff involved would not be appeared until they had been told the official size, provided by the architect and one of our existing car park spaces had been physically measured to prove that they would be the same.

Too much consultation appears to have clouded the issues on more than one occasion and even caused friction e.g. the submissions desk. All departmental managers developed the overall structure for the submissions desk and three of the most relevant managers were asked to develop the fine detail of the process as their departments would be most affected by any changes. Conflict developed due to the amount of consultation that took place. A number of different 'stubborn' opinions arose and developed into a disagreement, even though the staff involved in running the submissions desk would actually be managed by another manager. This process

was further clouded through 'back door' discussions with personnel and a senior manager within the submissions department. It was felt in hindsight that less, more focused consultation would have been more productive and resulted in a smoother process. This flies in the face of change management recommendations, but when too many people 'own' the situation or problem, then a resolution becomes almost impossible due to the number of conflicting issues and opinions. "Too many cooks" so to speak

The senior management discussed what they would ideally like the site to be, their 'vision' to work towards. They were in agreement that this would be a 'Centre of Excellence' they would be proud to be part of and would gain the respect of any visitors as a professional and competent place to discuss and submit forensic evidence. The main public point of contact being the submissions or reception desk, they wanted the staff to be helpful, friendly and knowledgeable in the examination of forensic evidence.

## The vision would therefore be:

'The amalgamation of internal forensic providers will ensure that Studyforce will receive the best advice from specialist forensic fields, achieving outstanding results by providing a mix of knowledge, professionalism, innovation and continuity. With this vision comes the confidence that <u>we can</u> be the best at what we do.

In the planning process we aim to develop and provide clear and realistic plans, successfully communicate them to the organisation and ensure that both managers and staff are strategically aligned to them. All staff will be asked to challenge their current attitudes and assumptions, support the need for change and realise what it will take to create success for the site as well as for themselves.'

DCI, Scientific Support, Studyforce, Single Site Project Board Briefing Document 2004, p1

This was quite a demand on the managers, but all were united in being enthusiastic about the project as the one thing they all wanted was to make the best of the opportunity. It was accepted that not everyone may like every aspect of the project, but were realistic enough to know that this was something we could build on, but needed to be committed to from the start. It was also understood that this was not going to be necessarily the same with all of our staff. Some would be enthusiastic and others would be completely appalled by the thought of a move to a new site, even with improved conditions. An example of this was realised through a member of staff, who every time I saw him would immediately say "I'm not going, you know, I'm not going', even if I'd just passed the time of day with him!

Postscript: He not only moved, but is still working at the site with no intention of moving and some different issues to campaign about!

In the initial months of the project, prior to the author's involvement, the Scientific Support Manager, had a clear view of the potential for change and improvement, but

not a realistic plan for implementation: he felt that it would evolve along with the project. Some of this may have been due to the fact that at every stage for the first twelve months, the project could have been rejected and, in fact, this had happened on a number of other occasions in the past. The project therefore did not become 'real' to many people until the bulldozers moved onto the site, indeed the vision was not created until nearer this point.

The business case was one from many years previously that had been resurrected and was then turned into a presentation for the police authority, who need to authorise new building projects due to the large expenditure levels. The design team were given permission to scope the idea and provide more detailed financial costings. By this stage a location had been identified and the process was in motion and revealed to the department.

The opinion of each manager varied, most were in denial initially until the site was confirmed. The opinion of the staff also varied. Most questioned the location and why there had been no consultation on this aspect of the project. Those already working outside the city centre were less negative than those working within, due to the convenience of their extant locality next to the shops, with excellent public transport options. Some were concerned over the difficulty that the new site posed for their transport to and from work, shift workers particularly. The site is on a main bus route, but some have better and faster transport to the city centre. The bus route also has a past reputation for poor service and trouble with drunken behaviour etc. but this has

been improved significantly, as with all public transport routes by the introduction of a 'Safer Travel' policing team in the region.

## 2.4.1 Stages 1 and 2 – Expressing the unstructured situation

During stages 1 & 2, the SSA analyst builds up a picture of the current situation and pictorially represents this through a rich picture, which is a diagram showing the various issues, departments and people at play in the situation and how they are currently placed. This will be used as the comparison with the desired state and therefore needs to be a 'rich' and complete as possible. During the later comparison stage it may be necessary to investigate further and fill in any gaps in order to see as accurately as possible what needs to be done in order to change from the current to the desired state.

During this stage the author also carried out research into some of the new techniques that may be employed at the site. Fact finding visits were carried out to other forces and recognised world class companies to investigate the feasibility of such techniques and any requirements that would need to be met. In order to define the unstructured situation, one can use any number of existing techniques in addition to the usual information gathering methods. While research techniques such as questionnaires are useful for gathering information, techniques such as SWOT and Pestle analysis etc. are useful for exploring the overall situation and identifying potential issues that are being raised during interviews etc. Some of these techniques are also a useful way of summarizing the issues that are raised from a number of sources, prior to producing a rich picture of the situation. Steps 1 & 2 are all about defining the whole picture, a kind

of 'base lining' from which to start any comparisons made later. This is how it is now, good or bad; these are the issues surrounding a particular situation.

Usually the situation is vague, hence why a system such as this is used and therefore needs 'setting out' so that the whole complex issue can be clarified somewhat. At this stage, it may not even be known what the actual problem is, just knowledge that things can be improved on what they currently are. The starting point may also be in the form of a request to review a situation to see if any improvements can be made. This is likewise the part of the process where the analyst gets a knowledge and feel for the situation, bringing together various pieces of information, interviews etc. to piece together a view of the situation not previously seen, despite the availability of all the aspects. This review in itself can be a useful exercise to be carried out by a manager in isolation, to look at current processes and the current cultural/social climate within an organization, a view not normally seen in the day to day management of the organisation.

To consider and express the 'problem situation' in this case, it was necessary to take a step back from the author's formal role. This is not unusual, as most analysis of situations is done by consultants in order to give a fresh outside view and new perspective of the situation, therefore a conscious step back to review what you think you know about the situation is a useful exercise. There are many thoughts on whether the analysis is best done by 'an outsider' or one who knows the role in detail, but in reality, the author's close links with the organisation meant that in order to view the wider aspects of the situation, it was necessary to start from the beginning, one

step at a time and be critical of any observations recorded. The fact finding visits previously mentioned were also useful for looking at the situation from other police forces views.

During the project, some staff were adamant that a particular view, i.e. their own, was true and therefore any information that contradicted this view was to be disbelieved. For example, the issue over payment of additional mileage allowance. Early in the process, the senior management responded with what was viewed as a vague response i.e. that an allowance would be paid to those that qualify. This did not give any detail as to who would qualify, but was the most comprehensive answer that they could give at the time, as the policy was still under development. The staff felt that this was them being evasive, so examining the response from two different perspectives had made a huge difference to how it was viewed by various parties.

As the author was part of the system under discussion herself, it is always debatable about the effect one's knowledge or view may have on the analysis. Although this must be taken into account, it should also be noted that this would also be the case with an outside consultant. They too would have a 'world view' which may colour or influence their appreciation of a situation.

There will inevitably be certain vagueness about any situation; after all, that is why analysis is necessary to help clarify the issue. If it were clear cut we would invariably know the way to solve the problem, but the vagueness makes a solution less clear, what the problem may be and even if there is one. One final point can assist in making the observations more credible; facts and figures, already collected by the police in the

form of performance indicators etc. can add balance to some of the information.

Secondly, recent reviews carried out by HMIC (HMIC 2004) add weight to the author's findings.

This is the usefulness of Soft Systems Analysis. Rather than force you to ask a distinct question for example 'why is something happening?' it allows you to name a problem situation, which may be vague and discuss it thoroughly in order to look at why it may be occurring and how it may be prevented. Thus it does not restrict the exploration of the situation or narrow down the efforts of the researcher. As many problem situations occur as a result of a set of circumstances rather than a single occurrence, a single question may narrow down the analysis rather than exploring the situation around the problem area. Furthermore, by taking into consideration not just the physical facts, but also people's feelings and thoughts, it can be seen that often the perception of a problem situation is different to both those involved and those 'in control' that may be trying to resolve the problems. There is a need, therefore, to see all of the multi-facetted issues.

Of course, by reading current literature, including recent national reports such as the results of assessments, one gets a sense of what is technically needed to develop a good site, but only through the experience and hard work of all the staff can you expect to develop an improvement in the service. Even in areas such as the laboratory which has seemingly poor facilities, a change in location alone is not necessarily going to improve performance and the service given. Thus by looking at cultural and social

issues in respect of the situation in addition to the physical aspects, it is hoped that a better and more thorough route to improvement can be developed.

In order to review the situation, the author initially talked to the Scientific Support

Manager, interviewed him and used his opinion, as the instigator of the new site, to

develop the framework on which to base the analysis. The key points he raised were to

give an improved service potentially by combining some existing services, but

predominately by using their co-location to streamline services — a 'one stop shop' in

order to give more developed and insightful information on cases. He also wanted to

improve the facilities currently held by each department in order to give a more

professional image and base on which to promote the service.

In addition to this the project manager spoke to each department manager to get their perspective on how the project would affect their department and staff. The aim of this was to get to know their initial impressions of how they felt their staff would react to change, again just to give the study a baseline to review expected difficulties and those that were presented as the implementation progressed. This sounds negative, but it is the adverse reactions that need to be addressed in order for the best set of circumstances to be in place for the project. The good reactions will, of course, need encouraging, as they should not be ignored in the process and need to be developed within departments in order to raise enthusiasm for the project.

At this stage, it was felt that people were fairly open about their opinions, as most were still reserved as to whether the project would go ahead. Final approval for

funding had yet to be granted, although provisional agreement had been given and more detailed financial predictions been asked for.

"When it was formally announced, slightly disappointed by the geographical location.

Slightly concerned about the planning required but relieved that the time scale gave scope for forward planning and modelling"

"My feelings were mixed. Predominately I was happy to be moving the departments out of [Name withheld]. It is an office development and not best suited to the requirements of the photo lab. The accommodation we occupy at HQ is in need of alteration so the move to the brand new single site came at a good time.... I did have a concern that the move out of the city centre may make staff retention a problem."

Questionnaire Responses by the Scientific Support Management Team January 2006

As part of the initial examination of the situation an 'away day' was held for the managers of the effected departments. The 'away day' was organised to develop the concept and vision, a facilitator joined the group to help get the process started. The group were introduced to De Bono's six coloured thinking hats (De Bono 2000). Each of six hats or feelings has a different colour and depending on which hat you are wearing your view changes e.g. the green hat is for creativity, thinking of new ideas without any restrictions or boundaries, whilst the black hat is about facts and those things we cannot change and need to accept such as the location of the building. The yellow hat is about all the good things and the blue hat is about our aspirations.....This later

proved to be very useful in other development sessions because it allowed people to express views in a way that they seemed comfortable with, stepping out from themselves to express an opinion or a concern. "If I can just put my black hat on for a moment to make a point" (the black hat being the gloomy, negative one).

With the end in mind, the group were asked what they wanted to achieve in the new site. What would it look like? How would it feel to visitors and those who worked there? What does it sound like? What kind of atmosphere does it have? Forget what is or isn't possible and imagine the ideal new site to work in. Pictures were also supplied to supplement these 'feelings' of what the site would be like to work in or visit. It was very reassuring to see that the group wanted similar things from the site:

- A modern well equipped building
- Respected as being professional, recognised by our high standards
- Known as honest and approachable, where a visit is felt to have been of benefit
- Uniform to enhance the professional look?
- Warm friendly atmosphere
- All of the departments working well in synchronicity and cooperating with each other
- Each member of staff feeling cared for, supported and well trained
- Proud, motivated staff and managers

The general consensus was that the group had benefited from this exercise by realising that despite their differences, they did have a common goal that they would like to

achieve and that just maybe by working together it could be achievable. Further to the exploration of creating a vision, the concept of the 'coping with change' strategy was introduced to the managers so that they would be aware of some of the reactions they themselves and their staff were potentially going to exhibit during the process: The stages of this personal strategy are documented in Carnall (1995) as:

"Stage 1 Denial – We've got this far before, it'll never happen.

Stage 2 Defence - Reality bites. (This can lead to depression, frustration and defensive behaviour).

Stage 3 Discarding - Starting to let go of the past and focus on the future. (The availability of information can help with this stage, as can pilot studies for new systems).

Stage 4 Adaptation - Experimentation in order to help new systems work, settling in period.

Stage 5 Internalisation - New systems and methods become established and accepted."

The second part of the day was scheduled to be a walkthrough of the submissions process which was the newest and arguable the most important part of the new site. The concept is completely different to any other Scientific Support unit in the country and therefore there is no real blueprint to base the group's ideas on. Frustratingly, the group only briefly discussed the concepts, due to a shortage of time. The group firmly believed these issues needed to be discussed and laid out as early as possible in the process because of a number of key issues which may be difficult or time consuming to

resolve, including the potential change in role of the staff currently managing the submissions process.

Firstly the submissions unit would be a new department formed from existing staff from a number of departments, plus some new recruits. The existing staff would all have worked with part of the process, but not the whole case, which will require decision making skills. Secondly the unit would be handling exhibits for a number of departments who have previously had their own individual submissions desks and therefore have not previously had uniform submission criteria that apply across every department. Thirdly, the new recruits would not only need new job descriptions, but these would also need to be graded for salary, approved for establishment and the finance found within the existing budget. As no recruitment into new additional posts is currently being approved, other departments would need to lose posts to provide these new ones. This would not result in anyone losing their job, as there are a number of posts vacant that could be considered for this reallocation exercise, but this did not ease the tension between departments, who naturally wanted to keep established posts rather than giving them up. As the new process is not duplicated anywhere else in the country, the staff had little with which to base their confidence on whether their department could work with the reduced numbers, so apprehension was high at that stage. As Carnall (1995 p142) so succinctly put it "Change creates anxiety, uncertainty and stress even for those managing change, and even if they are fully committed to change. Seldom are there any guarantees that the new approach will work, will deliver the goods!" Each of the issues mentioned are major hurdles to overcome within short timescales, particularly given the bureaucratic nature of a public sector organisation.

Further to the 'away day' a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was also carried out by the author to try to pinpoint some of the broader issues that would arise from the changes. The results of this are shown in the next section 'Naming relevant systems and building a picture of the problem situation'. This was a good point from which to start the rich picture, as she could pictorially gather the information and try to order it in some way. Another reason for talking to managers was to see what, if anything, they felt wasn't working with the existing system. It's interesting to note at this stage the difference in opinion between senior and middle managers. The senior management in this case felt that change was necessary to improve and some middle managers (those whose facilities were poor) would agree. Most though seemed to prefer the status quo and if their system works, they did not necessarily want to change it or feel it would improve matters. It is important to remember that resistance to change isn't restricted to the staff only, it is also present in some managers and support therefore is not necessarily forthcoming from those you would expect to be supportive of change if it is just general improvement i.e. senior or middle managers.

To gauge the general mood of the managers and consultation group, a questionnaire survey was carried out. The two sets of questions focused on the same areas and focused on initial feelings and emotions to the news of the move, plus the level of consultation that had been carried out and whether they felt it had improved the process for the staff or conversely added to any confusion. Although the questionnaires were handed out to and completed by only small sample groups

(although with almost 100% response rate), the author was interested to gauge the general tone of those involved in the process itself, i.e. the department managers, and those who considered themselves to be in the numbers who had information kept from them, the staff. The questionnaires were handed out personally by the author in order to explain fully how they would be used within the thesis and answer any queries on the questions. A period of a fortnight was given to allow time for the candidates to consider their responses and observe the project process around them if they so wished. The questionnaires were then returned to the author and immediately reviewed and summarised in the table which follows:

### Questions

 When the move was first announced, what were your initial feelings/emotions about the project?

## Response from managers

- Mixed feelings, good move, but location may make staff retention difficult.
- Very pleased, been waiting a long time.
- Good but will miss the city centre.
- Great, we can make the department the best in the country.
- Slightly concerned about the amount of planning required, but good timescales for this process.
- Disappointed at the choice of location

## Response from staff

- Wary
- Concerned about additional travelling time.
- Good move and closer to home.
- Slight disbelief that it would actually happen.

- 2. How do you feel about the level of consultation/communication so far?
- Information good in some areas, lacking in personnel issues.
- Good consultation. Slight breakdown of communication in one area, due to local change of management.
- Excellent in some areas, average in others. Difficult to get answers in a force this size.
- Excellent. I work in one of the remote departments and have never felt left out.
- Good, I missed some meetings, but was kept well informed.
- This has been adequate, not too much to be overloaded.

- Very good, website allows people to find out facts for themselves.
- · Not at first, but good now.
- Very good, I've never known a project so well discussed!
- · Poor at the start, but better now.

- 3. Has the website and availability of information changed your feelings about the move and if so in what way?
- Yes, the more information people have had, the more relaxed they have become.
- Yes for those with no travel issues. The others will still be concerned until they resolve their own issues.
- No, but it's kept everybody well informed.
- Yes, the staff feel more involved and consulted and have an opportunity to express their concerns directly to the project board.
- Not really, but has been informative.
- Not really, but the ideas and suggestions are useful.
- It's easy to be cynical about the information given, but the website has made the information open to everyone.
- Nice to see the progress in pictures, builds the excitement.
- Inspired move! Keeping people abreast.

- 4. Has being involved in the process yourself as a member of a consultation/development group made a difference to your feelings about the move?
- No, still feel very positive about the move.
- More comfortable knowing there is a project manager in charge keeping the process moving.
- No, I've always been positive about the move.
- No I am confident things are being considered fully.
- No, as I have always been positive about the move except for the extra travelling time needed.
- No, but has helped to iron out misconceptions.
- It has been positive as the group have new ideas/suggestions.
- · Never had an issue anyway.

#### • Yes, but not necessarily this 5. Do you think moving to a • Yes, excellent opportunity. single site is a positive move by Yes, better facilities and better particular site Scientific Support? long term options for the staff. Yes, better communication and Yes, raised skills and profile. multi-skilled staff. Yes, it is the best thing to improve Yes, much more professional the department. environment. Yes, it will help us in the strive for excellence. 6. How do you feel about the design · Fair distribution of space, had · It is better than the old one. of your new department? How input, but concerned about Not much input given by me. much input have you and your · It looks functional, but we have future growth. had no input into the design. colleagues been able to have? A bit disappointed with some late changes, but best that could be · Ahh... no discussion about done with the facilities available. anything. Concerned about the lack of large Very happy with the new storage areas. department, very modern I have been consulted during the Only consulted after plans whole process. Only concerned were drawn up. that the facility may be too small due to the building restrictions. I am pleased with the final designs, which meet our requirements I am overjoyed by the layout as our sample store is now conveniently at hand, just how we requested it.

As can be seen from the responses, the underlying feeling was that this was definitely the right way forward for Scientific Support, but not necessarily the right location for the staff. Whilst it is almost impossible to find a location that will please all of the staff (even the city centre is not agreeable to everyone, especially if you are trying to park!), this location's mediocre transport links proved to be a significant issue for the large number of staff who were currently travelling by public transport to their existing place of work. It resulted in the project producing the thing most organisations are trying to discourage; giving staff little choice but to travel by car to work.

A lot of work was carried out to dispel the rumours about what a dangerous area the building was located in and it was never substantiated as to where the rumours originated from, as some of the department staff had previously worked at the site and had no issues of concern whatsoever Indeed, those staff who had to vacate the

building to allow the initial construction work to take place were extremely disappointed that they would no longer be working from the site, particularly after the refurbishment had taken place.

It was felt that the most disappointing response was that of the final question. Having disseminated plans for consultation, very little had taken place according to the responses. This should be tempered with the fact that the author had a number of discussion sessions with her own staff in the laboratory in the early stages of the process, but when the temporary replacement manager was in place, she was approached about the lack of consultation, as she had had a staff meeting and been informed that no consultation had taken place! Fortunately the meeting notes were recorded and a list of suggested changes made. This was reissued for her to review and discuss further with the team.

As the project manager, the author found this somewhat frustrating, as naively she had expected resistance among some staff, but not managers. It was her perception that managers, although they may disagree with a decision to change, would be professional enough to realise that participation in the process was important for the benefit of their department and staff in order to develop the best, most user friendly facility and processes for them at the new site. As the project progressed, it was found that those who disagreed with the move went into a type of denial and therefore did not cooperate fully. There was no outright refusal to cooperate, as this could have been dealt with more easily, but instead some needed to be prompted more often and never met deadline requests or never answered requests fully and needed to be

questioned further. We found this very frustrating, as some senior staff gave just enough cooperation to prevent criticism within the organisation, but caused enough delays to make keeping the momentum in the change process even harder to maintain.

Another project manager may have taken these answers at face value and then not provided the best facility for all departments, but this is one area where the author's knowledge of the other managers and department processes was an advantage! There was an overall knowledge base broad enough to see if a request has been answered fully, but there was still a danger that something could be missed therefore, maximum participation by the department managers was always encouraged. This also left no excuse for the departments if they did not get what they wanted. Full opportunity to develop was given to all departments.

# 2.4.2 Naming Relevant Systems and Building a Picture of the Problem Situation

This empirical study has been an extension of the author's theoretical work, only this time observing the methodology in action and her application of it. A SWOT analysis was carried out as a starting point, which is shown as Diagram 6 with which an attempt could be made to try to scope out the bigger issues in the move.

Strengths	Weaknesses
<ul> <li>'One stop shop' for specialist issues</li> <li>Sharing of expensive technical equipment</li> <li>Faster movement of cases between disciplines</li> <li>Better staff resilience if used well / multiskilled</li> <li>Easier to multi-skill in a single location</li> <li>Officer in Charge of each case can receive advice reference multi disciplines</li> <li>More efficient/effective delivery/collection from region and specialist providers.</li> </ul>	<ul> <li>'All eggs in one basket'</li> <li>Enough parking?</li> <li>Not much room for future growth?</li> <li>Not the best location for public transport</li> <li>Isolated from senior departmental management, will require local site management.</li> </ul>
Opportunities	Threats
<ul> <li>Rationalise equipment / resources etc.</li> <li>New and joint services can be provided</li> <li>Streamlining of service to improve efficiency</li> <li>One submissions desk for all departments – no duplication</li> </ul>	<ul> <li>'All eggs in one basket'</li> <li>Staff retention due to location change?</li> <li>Loss of contact with senior management</li> <li>'Out of sight, out of mind'</li> </ul>

# **Diagram 6 SWOT Analysis**

This, in turn, gave the author a starting point from which to draw a rich picture and start drilling down deeper into the issues. It was decided not to use the diagrams and models directly with the subjects, as it was believed this would affect their professional opinion of the project and the author personally. The environment she is employed in is fairly formal, so notes were taken from development meetings and discussions with staff on consultation groups, combined with information from the senior management meeting or interviews and physical restrictions from property services. These were used these to define the problem situation. A rich picture was drawn, but wasn't shown to anyone at that early stage. It was felt that whilst some would understand why a picture had been drawn, many were old fashioned in their views and the personal decision was taken by the author not to show them. All of the staff were aware that they were helping to build up a 'picture' of the needs, problems and issues

etc. of the situation and the meetings were summarised to ensure that the author had recorded the information as accurately as possible. These notes were distributed to all those taking part to verify this. Where groups could not agree on a way forward, for example, when deciding which staff roles were best used on the submissions desk, the meetings were written up with various options examined and these were referred to the Scientific Support Manager for a final decision to be made. The author also confirmed important decisions made as a group if the Scientific Support Manager wasn't present, just to ensure that the project was kept in line with his overall 'vision'. This became more difficult as time progressed because the changes in acting Scientific Support Manager meant differences in opinion with the original Scientific Support Manager's ideas. Initially this had not been a problem because the secondment was only thought to be short term and therefore they concurred with his original vision. As the secondment was extended, the existing Scientific Support Manager had to let those 'acting up' in his place take decisions and these were sometimes in opposition to the original ideas as they became bolder and more confident with the situation. This was also because their own position became unstable. Would the Scientific Support Manager be back? Or would they have the opportunity for promotion instead and therefore need to make an impression?

In hindsight, it is thought that some members would have embraced and benefited from the rich picture method, as it is easier to visualise problems this way, but the author did not wish to be ridiculed before she had even started! This formal method worked very well as it also left the process with a series of notes that could act as both

an aide memoir and record of events for both the PhD study and the formal project itself.

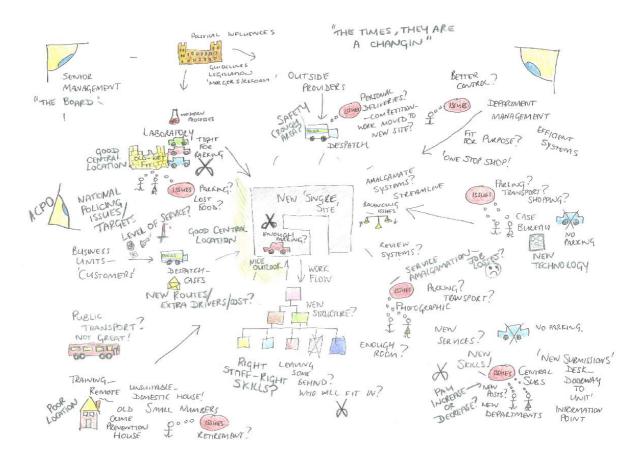


Diagram 7: A full size A3 copy of this Rich Picture can be found in Appendix 1

So, as may be interpreted from the rich picture of the problem situation below, the main themes arising initially were concerned with the location of the site and how the new site systems would work. As each department had some overlapping elements such as administration staff and submission desks, how would these work in a single location? The new combined process would need to be developed to meet the needs of all the departments involved and improve the service where possible.

Part of the aim of gathering data for the rich picture was also a desire to get the individual departments to see 'the bigger picture', no longer just focusing on just fingerprints or photography, but to be more knowledgeable about all aspects of this field. At this stage there was definitely a need for the 'rules of engagement' to be discussed and developed e.g. should we all wear a uniform (we don't currently, but it may promote a better corporate image), would there be a post room or switchboard to deal with calls?

Secondly staff retention through the change process and move gave concern. As already identified, some staff work shifts and travel long distances to work, but have a straightforward journey to the city centre. This journey became extended at the new location and in some cases very complicated. Many of the staff were experts in specialist areas and needed five years training to qualify. These staff could not easily be replaced and it was important that we addressed any problems and issues in the early stages of the process to retain as many of them as possible. Of course this made the wish to employ multi-skilled staff within the new site a bit of a pipedream, as some departments would not be in a position to do this very quickly. It is possible, though, as proved by one of the larger organisations within the same field. That organisation has slowly trained up its entire specialist staff to be multi-skilled and rotates them to maintain the level of skill needed. This has taken a significant number of years to carry out though and costs a substantial amount annually in training to maintain.

A number of outside influences, one of which is government policy, affect the public sector and therefore this type of department. It is notoriously changed on a regular

basis and being able to 'future proof' a new site as much as physically possible by making it flexible is always a concern with any new building project. This is rarely about future growth, as this is generally limited, but usually in relation to new scientific processes or changes in regulations that allow us to carry out work on a greater range of cases.

# 2.4.3 Stages 3 and 4 – Defining the roots and Conceptual Modelling

As can be seen from Checkland's concept model in Diagram 9, stages 3 & 4 are about defining where you want to be; the ideal world. In order to do this, the analyst must develop a root definition in order to describe what the system should be like. From this, a concept model can be produced and by doing this, a comparison can be made between the current and ideal situations. The project manager can then potentially move forward in applying necessary and suitable changes.

Root definitions can take two forms:

- A Primary Task Root Definition
- An Issue based Root Definition.

Primary Task Root Definitions cover processes which the organisation being studied performs as a part of their regular activities (for example, in this case, the fundamental process of achieving identifications on a daily basis).

Issue Based Root Definitions cover processes which are rare or occur as a one-off. The case study is a clear example of this in that the move is a one off occurrence with a structural change included.

As in most situations in the real world, the ideal situation is just one viewpoint and may potentially vary from person to person or force to force. In this particular case study, the viewpoint of Scientific Support is not so contentious, as it has been produced from the core aim of any Scientific Support Department i.e. to produce identifications that may lead to convictions.

The mnemonic CATWOE is commonly used to ensure that all of the relevant criteria are captured in the root definition. The elements of CATWOE are defined as follows by Checkland:

"Clients - (those who more or less directly benefit or suffer e.g. customers)

from the machinations of the...

Actors - the players (individuals, groups, institutions and agencies), who perform the scenes, read and interpret the script, regulate, push and improvise. Identify and examine the role of local and institutional actors .... who undertake the.....

**Transformations** - what processes, movements, conversions of X take place? What is the nature of the production and service transformations? What is the content and processes involved from ingredients to a sandwich, from mixed, varied data to information, from an idea to a

performance concept or marketable product etc? What are the transformations that generate a product or a service? How are they achieved? How well are they performing?

Weltanschauung or world-view - what is going on in the wider world that is influencing and shaping the "situation" and need for the system to adapt?

Owners - the activity is ultimately "controlled" or paid for by owners or trustees. Who are they and what are their imperatives? How do they exercise their ownership power? Are their other stakeholders - who claim a stake and a right to be involved i.e. as legitimate quasi-owners. Ownership and the human activity occurs within an

Environment - the trends, events and demands of the political, legal, economic, social, demographic, technological, ethical, competitive, natural environments provide the context for the situation and specific problem arena. We need to understand these. "

(Soft Systems Methodology in Action, Checkland & Scholes 1990 p35)

During this stage of the project, a number of root definitions were considered by the author in order to try and fully understand the concept and produce the best set of models for comparison in the following stages. This was, after all, fundamentally a construction project and this needed to be considered before it was decided to settle on the final root definitions which were also concerned more with what the

department would be like, how it would work as a single unit and how people and departments would deal with the changes.

The overall problem situation may be seen as a root definition as follows:

A Studyforce owned system, managed through Property Services and Scientific

Support to relocate the majority of Scientific Support Departments to a new single site,
whilst improving the efficiency and effectiveness of the department and service
provided to the force.

- C Operational Command Units, Major Incident Unit, Scientific Support Staff, Members of the public, Forensic Suppliers (changes to output effect their service provision), Home Office Scientific Development Branch and other Home Office departments.
- A Project Manager, Scientific Support Department Staff, Personnel Manager,
  Property Services Manager, Scientific Support Manager, external agencies on
  the design team, finance Manager, IT Manager, Union representatives
- T Separate departments at three locations → Single location including rationalisation of departments and introduction of new facilities
- W The move will provide a better service. It must stay within budget. The departments will work together. The location will be as already decided.
  Against a background of political monitoring of expenditure and increased expectations of performance via key performance indicator measurement.
- O Studyforce, Scientific Support, Studyforce Authority, Property Services.

**E** Members of the public as victims of crime, criminals, government.

Amongst the other root definitions considered are the following examples, which cover a wide range of aspects of the project and therefore aim to give a comprehensive view of the situation. Some are those that would be more department based are also listed and gave useful insight into the more detailed design of individual departments, or as a minimum, more of a sense of direction in that process.

- A Scientific support owned and operated system, which identifies technical developments and evaluates them to define new services that can be effectively implemented, potentially increasing the number of detections.
- A Crime Support owned system, operated by the public and press relations
  officer, which seeks to improve the awareness of other force departments and
  officers of the services available within the new site.
- A Scientific Support owned and operated system that ensures that Scientific
   Supports role in crime detection and prevention is appreciated by people in
   other areas of the force in a way that improves the perceived image of
   Scientific Support.
- 4. A Scientific support owned system that appreciates the apprehensions of people moving to the new site and makes changes to improve their morale.
- A Scientific Support owned system that appreciates any new training issues
  that arise from the move and makes changes to ensure that those training
  issues and needs are supported and addressed.

- 6. A Scientific Support owned and operated system to evaluate the most effective way of moving the departments into the building, causing as little disruption to the service provided as possible and implement a timetable to manage any such method.
- 7. A Scientific Support owned and operated system to evaluate the current methods of submission and receipt of exhibits the department and identify potential changes and challenges to a single submissions desk at the new site.
- 8. A Scientific Support owned and operated system to evaluate a method of administering the new site, which is located five miles from the relevant administration departments such as Personnel.
- 9. A Scientific Support owned system, operated by Crime Support personnel to evaluate public transport issues relating to the new site and implement shifts or policies to enable staff to travel to the site and still meet shift allowance requirements.

Potential alternative views from departments who input into the system:

- 10. A Scene of Crime owned system to meet performance targets set by each OCU.
- 11. A Fingerprint Enhancement Unit owned process to provide high quality and timely fingerprint evidence that results in the detection of crime.
- 12. A Fingerprint Bureau owned process to provide high quality and timely fingerprint evidence that results in the detection of crime.
- 13. An Operational Command Unit owned system to meet nationally set performance targets using forensic evidence.

Although all of these systems and others were considered in the overall project, some to a more detailed degree than others, for the purposes of this thesis it will be the root definition "A Studyforce owned system, managed through Property Services and Scientific Support to relocate the majority of Scientific Support Departments to a new single site, whilst improving the efficiency and effectiveness of the department and service provided to the force." that will be taken forward and modelled in more detail to demonstrate the methodology process. This root definition was chosen specifically because it deals with the over arching project aim.

## 2.4.4 Modelling

Stage 4 constitutes the conceptual modelling stage of the process. Each root definition is taken and a concept model of the ideal situation developed, this in turn being compared with the real world situation.

So to reiterate, the overall problem situation may be seen as a root definition as follows:

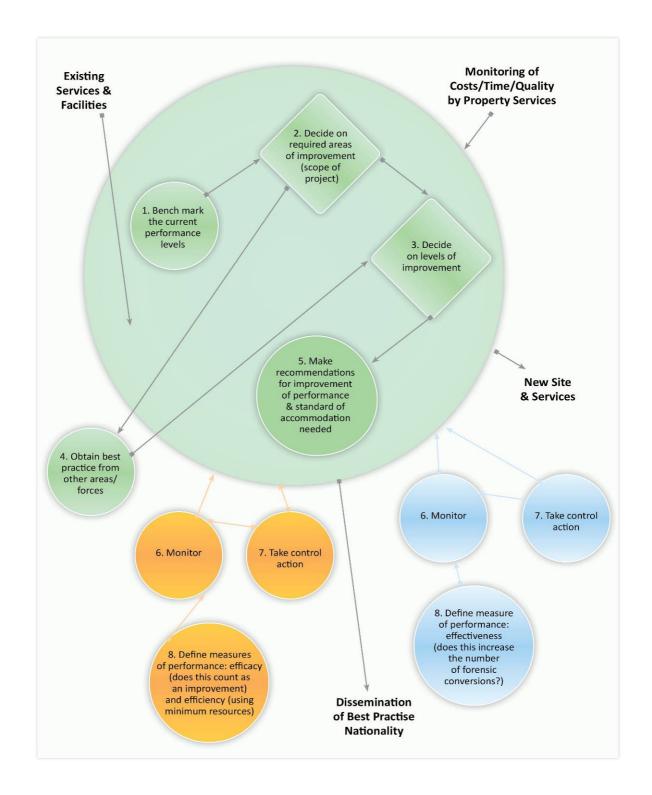
A Studyforce owned system, managed through Property Services and Scientific Support to relocate the majority of Scientific Support Departments to a new single site, whilst improving the efficiency and effectiveness of the department and service provided to the force.

Operational Command Units, Major Incident Unit, Scientific Support Staff,
 Members of the public, Forensic Suppliers (changes to output effect their

- service provision), Home Office Scientific Development Branch and other Home Office departments.
- A Project Manager, Scientific Support Department Staff, Personnel Manager,
  Property Services Manager, Scientific Support Manager, external agencies on
  the design team, finance Manager, IT Manager, Union representatives
- T Separate departments at three locations → Single location including rationalisation of departments and introduction of new facilities
- W The move will provide a better service. It must stay within budget. The departments will work together. The location will be as already decided.

  Against a background of political monitoring of expenditure and increased expectations of performance via key performance indicator measurement.
- O Studyforce Police, Scientific Support, Studyforce Police Authority, Property Services.
- **E** Members of the public as victims of crime, criminals, government.

It can be inferred from the above definition that there are many external as well as internal influences on these processes, through a number of customers who require particular services and a high quality standard of evidence. It is vital then that the service be developed to meet these needs and expectations.



**Diagram 8: Root Definition Model** 

It can be seen from the model that a number of processes need to be undertaken in order to define what current best practice looks like and is measured as, whilst at the same time benchmarking the various departments' current performance levels. The

Property Services Department will also have influence over the decisions as they control the budget and are responsible for the Cost/Quality/Time boundaries on the new construction. This may effectively 'cap' the level of change and improvement possible due to budget restrictions. Scientific Support can therefore only make recommendations through this model and work closely with Property Services to gain the best value for the budget available.

A number of definitions of police performance are noted nationally and therefore any improvement can be shared nationally as best practise.

## 2.4.5 Stage 5 – Making the Comparison

Having looked at both the 'real' and 'ideal' concepts in detail, a comparison needs to be made to visualise the gap between the two. In this way, steps can then potentially be highlighted to 'bridge' that gap. The model is used as a template for the 'ideal' situation with which to assess changes that will need to be made (Patching 1990). This needs to be an iterative process to ensure that both the model and the real situation have been accurately reflected or interpreted by the analyst.

Each of the steps within the conceptual model would potentially require a number of steps to complete and may be done a number of times by different parts of the system, e.g. both benchmarking and obtaining best practise could be carried out by one working group or on an individual departmental basis. The act of carrying out these tasks within each department may also help to alleviate some of the uncertainty

amongst staff by openly involving them in the development process and enabling them to see alternative ways of carrying out familiar tasks.

Once best practice had been identified and fact finding visits conducted by each department, the senior management team met to discuss how new processes would interrelate between the departments. These proposals were discussed with Property Services in terms of cost and budget availability. A number of significant changes were made in the early stages after this review. Having the opportunity to visit other forces and fully review how services could be delivered finally opened up many managers to the potential of the project.

The key points highlighted from the comparison of the real world and systems world models were:

- Distance between locations, slowing down and complicating the continuity of exhibits.
- Lack of joined up thinking and decision making between isolated sites.
- Inappropriate accommodation layout to facilitate streamlined service within existing accommodation.
- Services such as drug decanting or blood screening not currently provided.
- Insufficient capacity of DNA examination facilities for predicted future workload.
- Printing of fingerprints instead of secure electronic transfer (not possible in existing locations)

- Fingerprint Bureau desk design not conducive with eliminating back and neck issues.
- Disparate service provision to officers due to remoteness of locations.
- Duplication of some services and equipment such as photographic facilities.

Many of these highlighted issues had previously been raised in various reports and inspections, but it is only by formally going through this process of comparison that the project manager can be reasonably sure that they have covered the issues as comprehensively as possible.

Interestingly, these are the project issues, but by comparison, the following issues are those of more concern to the staff.

"Very concerned about the extra travelling time and how this extra time needed to get to work and back would affect my homelife..."

"AAH...No discussion about anything ...perhaps more hands on when we move....I hope"

"..moving will be a big impact on some peoples whole lives."

"After completing a dummy run it made me moreaware of the difficulties and changes
I am going to have to make to my journey, time of travelling and my family life. I realise
now that the move will not be to my advantage"

Questionnaire Responses by the Staff Consultation Group January 2006

## "Q: Will there be a secure car parking facility for all personnel?

The car park will be secure with a barrier restricting general access; security guards have been requested to control the site. After detailed examination of the fact finding survey and the number of spaces available at the site, it has been confirmed that, contrary to our previous thoughts, there will be sufficient parking available within the rear car park of Bromford Lane for all personnel wishing to park there.(24/10/05)"

"Q: Will there be any additional allowances to those who have to spend additional money on second cars, travel passes etc?

No, there are no further allowances available in force for these items, although the force does manage a discount scheme for rail/bus travel cards.(15/11/05)

Car Purchase Scheme: Tally Ho run a scheme called <u>Contraflex</u> which is advertised on the Sports and Social Club Website. (06/02/06)

Car Insurance: Cheaper car insurance is available through <u>Commercial Vehicle Direct</u> as advertised on the Sports and Social Club Website.(06/02/06) "

Questions & Answers from website accessed 22<sup>nd</sup> May 2006

## 2.4.6 Stage 6 – Deciding which are Desirable and Feasible Changes

Although changes may have been identified, they may not be feasible for a number of reasons. For example, the cost may be prohibitive or there may be insufficient staffing and resources to currently carry out a change in the process. Change can be identified as short, medium and long term and indeed some of the long term issues may never

be feasible. We are, after all, comparing the ideal world with the existing one, not a model of what we think will be feasible.

In reality, unless sufficient knowledge of the processes is known by the analyst, an in depth assessment of the feasibility of some changes may not be possible at this stage and further research need to be carried out. In terms of feeding back to the client, it can be useful to be able to make an approximate assessment of the feasibility where staff and funding are involved, just to allow the client to have a starting point from which to consider further work or comment.

The desirability of change can sometimes be harder to assess. At an organisational level, the desire may be there (or at whichever level the analysis was commissioned), but the desirability of the resources available in the form of staff can not be so easily judged, even in systems terms. Desirability is therefore held as those processes and changes that will provide the required outcomes for the system, but in the case of the police facilities, needed to be balanced with a requirement not to lose specialist staff by making their situation within the company untenable.

It is difficult when assessing one part of an organisation not to open old wounds between departments or a whole raft of issues on a larger scale. This was certainly an issue with this analysis, as the Branch carries out work for the whole organisation. In carrying out a detailed analysis one can not help but discover far bigger issues.

Obviously some would not form part of the brief, but it leaves the analyst feeling somewhat unsatisfied by the results, as in reality, even when Branch issues are

addressed through the move, the whole will fall short of the ideal. It also leaves participants believing that the gap may never be breached due to the disparate elements of the organisation and the ebb and flow of experience, opinions and political changes. Of course, to move on to the next stage of the process, one needs to agree a course of action and that can also be difficult in a democratic environment such as this organisation. The opinion of the specialist managers is important due to their experience in these fields, but if decisions reference the action needed to improve are to be taken, ultimately the Scientific Support Manager may have to override this opinion in order to move the organisation forward in a constructive and feasible manner.

An example of this was discussed briefly earlier. The various department managers could not agree on the best format for the submissions desk, which is the first thing that will greet any visitor to the building and is a fundamental part of the new service. As it has involved the bringing together of functions from a number of previously disparate departments, there are a number of opinions on the subject. In response, the ideas were documented and the Scientific Support Manager made the final decision.

As the project progressed further, all but one of the issues in section 5 were able to be resolved in the design of either the new building or procedures. The only issue excluded was *Printing of fingerprints instead of secure electronic transfer (not possible in existing locations)* and this was not resolved purely due to a lack of technology and

training within the Fingerprint Bureau. The project simply ran out of time before opening, but did schedule implementation for the following year.

#### 2.4.7 Stage 7 – Taking Action to improve

During stage 6 it was agreed that a number of actions were needed to achieve the required outcomes of the project at a strategic level. Stage 7 is all about a plan of action in order to execute these plans. During the case study, these were predominately agreed through a series of consultation meetings at both managerial and staff levels to work through the fine detail of applying new techniques or deciding on the most practical layout for a room. The overall plans were signed off by the Scientific Support Manager to add weight to expectations.

Having now described the framework on which the project was ideally going to be developed along, the next section of this text deals with the practicalities of such a technique and describes the twists and turns that will invariably evolve in potentially any project. It has been discussed how these measures are expected to provide a clear pathway to a successful project and in the hope of also reducing the apprehensions of staff by considering not only physical activities, but the effects on people within the process. In the following section the case study period and also the practical application of the soft systems outcomes in discussed in more detail.

#### 2.5 Actor-Network Theory Literature

In contrast to Soft Systems and Prince2, Actor-Network Theory (ANT) is predicated on a different set of values. It is an approach to social theory and research that originated

in the field of science studies. It was originally developed by a number of leading scholars including Michel Callon, Bruno Latour and John Law in order to understand the processes of innovation and "to analyse situations in which it is difficult to separate humans and non humans" (Callon 1991). If one considers that the case study is indeed an innovative project where it is difficult to separate the human and non-human elements, it is an ideal vehicle through which to review the project. It is through one text in particular, Latour's *Aramis or the Love of Technology*, 1996 that later in this thesis we wish to carry out that review as part of the critical analysis of the project. Why *Aramis*? Simply because, as a seminal ANT project review, written as a detective story it fits beautifully with the style of this thesis and the case study in discussion.

ANT is used most usefully as an exploration of situations or theories and technologies and why they may have succeeded or failed as a result of network integrity. This makes its use an insightful addition to this thesis in looking back as to whether the Single Site project failed or succeeded from a theoretical standpoint rather than the opinion of any single party. In their 2008 paper Andrea Whittle and André Spicer debated the extent to which ANT "provides a meaningful contribution to the body of critical theories of organization" (Whittle and Spicer 2008, abstract). They conclude that although ANT may be a useful approach to studying organisations "Indeed, ANT helps to understand how relationships can be organised and stabilized to create a durable and robust network" (Callon 1991), they would question its contribution to developing a critical theory of organization due to its naturalizing ontology, un-reflexive epistemology and performance politics. This goes against the nature of critical approaches which denaturalize, have a reflexive epistemology and an anti

performative politics (Whittle and Spicer 2008). In contrast to this Alcadipani and Hassard (2010), drawing on the 'ANT and After' literature, argue that in fact there is a way in which Ant can be used to de-naturalize organisations and deliver critical performativity. Knights and Scarbrough (2007) also argue that ANT has its place as either complimentary to (as we have used it within the case study to compliment SSA) or as an alternative to Mode 2 research.

Actor-network theory looks to understand what is happening around the organisation or project, for example as its use in *Aramis or the Love of Technology* 1996 (*Aramis*), which examines the project to design and build a rapid transport system for Paris, to see if it can be ascertained what went wrong.

There are three main criticisms of ANT (Harris 2005), firstly that it is predominately reactionary (Bloor 1999). Indeed *Aramis* itself is a reactionary text, but one would assume only in order to demonstrate the subtleties of the constructivist theory applied by Latour.

Secondly, that the symmetry between humans and non-humans is unrealistic and "installing a great indifference between the countless things of the world, an indifference which arises when they end up being portrayed as potentially all the same...Thus humans can be treated as if they are nonhuman things, while nonhuman things can be treated as if they are humans." (Laurier and Philo 1998, p1060).

Latour believes differently; The attention of technology also needs to be 'grabbed' just like any other actor, in the sense that it needs to work or be inspired to work in order

to create innovation. We believe this doesn't indicate an indifference to the human/non-human actors, rather an importance to both in the overall process of maintaining networks. " Innovations have to interest people and things at the same time; that's really the challenge" (Latour 1996, p 56).

In *Aramis*, Latour places the technology on equal footing with all of the other actants and creates a persuasive argument in the fact that the technology needs to work and attract the other actors within the scenario in order for the project to continue and it (or the fair) does appear to yield a power of its own in the attraction to producing a successful technology for the worlds fair:

"The second train of thought that accounts for my 'conversion', if you will, was the 1989 World's Fair. Every exhibit presupposes a new form of transportation. Within the gamut of what was being proposed, Aramis was really innovative" "That's what made me change my mind" [no.18]"

M. Gerard head of RATP at the time Latour (1996, p137)

It is worth noting that in *Aramis*, Latour also discusses in detail 'the human voice' and how it was also neglected at some points during the project, adding to its potential to fail, particularly as it was a human transport system that was being designed! "The main advantage that the transportation experts are excited about – the cross between private cars and public transportation – is profoundly shocking to the man in the street" (Latour 1996, p 188).

Thirdly, objections have been made to the fact that it is amoral i.e. power, gender, culture and ecology are not explicitly considered. These positions can be taken up, but this depends on the network and its setting and interactions (Harris 2005). In *Aramis*, it is clear that all actants are discussed equally and openly; the head of RATP as much as junior members of the team. In fact Latour argues that the process is far more about the importance of grabbing the attention of actors, regardless of whether you are human, non-human or your political power in a situation. If you cannot grab the attention of actors and sustain that attention there is a risk that some networks and therefore the project may fail, but also there is no momentum to keep a project moving forward. "Grab calendar time and you'll find yourself empty-handed. Grab the actors, and you'll get periodization and temporality as a bonus" (Latour 1996, p 89).

Through tools such as the heterogeneous network, translation and generalized symmetry, ANT documents the network of relations in a situation and aims to describe whether it succeeded or failed through these relations. Differences in the actors and influences involved in the network are explained through their network relations and how successfully they form and hold themselves together or fail.

# The heterogeneous network

ANT assumes that components of these projects or situations form networks consisting of material and semiotic aspects. Human and non-human elements are treated equally and as being the same, with the same influence.

A specific 'social' machine must be assembled, indeed perhaps a 'Machiavellian' alliance between the different parties. Their interests differ, but keeping each other in

check and the group together. (Latour 1987, 129) This could also be said to be true about projects and the case study demonstrates an example of this. The different department managers have their own and their department interests, but machine or project must be assembled and kept together in order to bring about the mutually beneficial changes to the organisation.

# **Generalized Symmetry**

As discussed, criticism for ANT comes mainly from the indistinction between human and non-human actors, which goes against the commonly held view that people, animals and inanimate objects are all different. All actors are treated as equal in the network and therefore it does not consider political influences and other. An actor is not just a physical object or person but an association of elements, themselves forming a network (Law 1999)

## **Translation**

#### The world and our perception

The barrier between form and language has been a long debated issue in philosophy. Heidegger (1978) states that 'what is spoken is never, in any language, what is said'. It is true to say that when carrying out research of any nature, a number of things may affect the way in which we view the results. Our world view, ontological and epistemological stance will colour that which we are seeing and therefore there may well be a gap between the 'real world' and that which we perceive to be true. After all, do any of us really see the 'real world' or just our perception of it? This is true also in respect of how we read another authors work. As critical scholars we must not let our

preconceptions colour what we see and understand in each text. We must be open minded and creative in order to explore the nuances of an authors work.

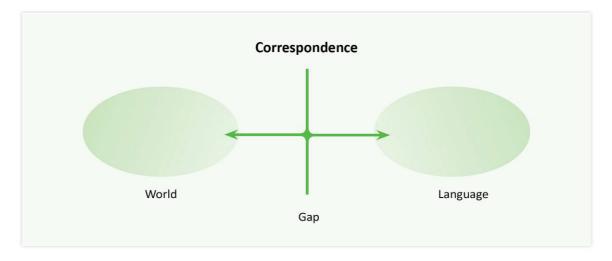


Diagram 9: The Saltationist's Conception of the Feat of Correspondence

In Diagram 9 this gap in perception is shown in the form of the 'Saltationist's' conception of the feat of correspondence (reproduced from Latour 1999). It shows the gap between the material 'real world' and language, or words. It is a commonly held philosophical notion in both modern and post-modern science that a gap exists between the cognitive subject, which Latour calls the 'brain in a vat' and the material world. There are many different theories as to the context of the gap and how, or whether it may be bridged and Latour's work in *Pandora's Hope, Essays on the reality of Science Studies*, 1999 set out to examine this gap and how it may be bridged during field work. He concluded that there is no gap, or that it may be bridged in such a way as to not be perceivable as a gap at all.

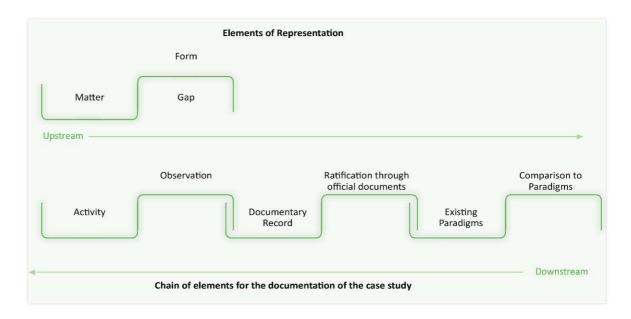
Through the use of his concept *Circulating Reference*, Latour believes it possible to remove the perceived gap so that it no longer exists. This is done in small steps via

chains of translation. He further believes that a thing can remain more durable and be transported farther and more quickly if it continues to undergo transformations at each stage of this long cascade.

## **Chains of translation**

Each small step takes the philosopher further across the gap between the real world and their perception of it. In order for the gap not to reappear, it is an essential property that each step must be traceable from the last and to the next and therefore reversible (Latour 1999). The chains lose plausibility when you are no longer able to move back as well as forward along them. There should always be a link to what is being measured, however infinitesimal it may transpire to be. As soon as that link is missing, the gap once again becomes present.

Just as when Latour is examining a situation concerning the natural sciences, he is able to adapt his concepts equally to the social sciences, so it is possible to apply his theoretical concept to the real world situation of the case study.



**Diagram 10: Chains of Translation** 

Diagram 10 shows the path of the chain and the articulation from materiality to reference (reproduced from Latour 1999 and modified). It can be seen that each translation bridges a tiny piece of the gap without losing the essence of the original information. The direction of mediation is away from the material world while iteration and reiteration is necessary to revisit this world and review or rework the information gained. This is particularly possible in forensic science, as new, more sensitive techniques are developed and can be used retrospectively on samples recovered. By comparing this with Diagram 3, the 'salutationists' conception, it can be seen that the 'gap' is bridged by small steps. Each is a move towards the articulation of events occurring out in the field, or 'real world', the translation of matter into form. This can be recorded in many forms, e.g. through sampling, categorising or critically reviewing the data generated.

In the example above showing the data collection from the case study, the translations consist of a series of actions. The observer records the actions and reactions that they are viewing and documents each activity. Additional documentation such as official records of meetings, are used to ratify these observations. Existing theories and paradigms can then be used to theorise on events and develop a richer picture of events.

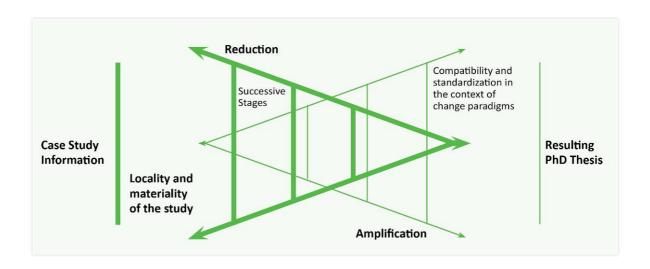
The analyst, in this case the project manager, may then compile the evidence. Rather than Latour's pedocomparator and cabinet (Latour 1999), a collection of ratified observations is stored in a virtual cabinet in the computers memory, or as a series of physical notes.

This table is only part of a much bigger overall chain. In the same way as Latour's forest and savannah are converted into firstly a pedocomparator and cabinet then to reports and textbooks, the physical act of observing the change in progress and peoples reaction to it is converted into ratified records and then computer records and on to the production of this thesis.

# **Amplification and Reduction**

During the transformation, some information will be lost, but much will be gained. In bringing the forest into the laboratory, Latour states that the locality, particularity, materiality, multiplicity and continuity may be reduced or lost, but in doing so, much can be gained such as compatibility, standardisation, text, calculation, circulation and relative universality. For example, this thesis as an item can be used to inform the

force or other interested parties, can be used to develop best practise or can be used to review further the police force's procedures in a way that the 'actual' day to day activity, if undocumented, cannot. The information can easily be reshuffled into diagrams or reveal patterns that were previously hidden to us, e.g. what are the common issues arising from this and other changes being made, or how is the self esteem of the staff affected during the change process?



**Diagram 11: Amplification and Reduction** 

Diagram 11 shows the potential amplification and reduction involved in the example chosen; action research for a thesis (reproduced from Latour 1999 and modified). In this particular case many different types of people will make use of the information, e.g. the author, academics, but also the police force. The reduction of information is far outweighed by the amplification for the production of greater knowledge. The aim of the thesis is to add to the bigger picture of knowledge for all and any patterns that are developing. Individual forces are responsible for the more detailed activity. And whilst the force will use this information to give it an overview, it will also develop other chains of translation to develop more detailed strategies e.g. to handle changes

occurring as a result of the flexible nature of police response. Can anything be done to enhance the quality of project management and level of understanding of change within the force?

In condensing the change process into a table or series of responses the locality of the situation may be lost e.g. the location of each department may affect opinion as to the suitability of the new location. These aspects are not necessarily transferred along as part of the chain of translation. In order to produce a table of figures as the outcome, it is necessary to quantify the information in certain parts of the chain and put it into the form that can be easily manipulated and viewed over, but the number of reasons for or against change will not necessary demonstrate the depth of feeling.

#### **Quantification and Classification**

The primary job of a bureaucrat, Latour (1987) argues, is to compile lists that can be shuffled and compared. How ironic then, in his later work that he is effectively encouraging this activity. To produce a useful table of figures, physical acts and items are converted into numbers, i.e. quantified. Quantifying slows down the process and gives you a snapshot of social order to look at. It comes about from 'cutting things up'. Where do you decide to place the cut? In order to do that, there is a necessity to classify things. How do you decide what goes into each portion? You use classification to draw the boundaries for you. And what does classification consist of? Bureaucratic lists!

In carrying out this process, each stage will exclude something. In the crime scene examination process, which takes place prior to Scientific Support submission, during

the first stage, those crimes that haven't been reported or given a crime number are not recorded or quantified. Likewise, not all forensic evidence types are recorded...what elements of the picture are we missing by successive reductions? This reflects on the success of any new facility as these losses may blur whether improvement is truly being achieved. Also, if it is, then is it due to new facilities or via other changes that will potentially have occurred elsewhere in the process. The reality of this project is that the force will directly compare previous results to those at the new site in order to establish whether the improvement has occurred.

When the Home Office view the overall picture it is therefore incomplete. In many respects, the table itself has politics as discussed by Langdon Winner and his Long Island Bridge (Winner 1977). He describes (somewhat controversially) how the bridges over parkways on Long Island have a very low clearance, therefore only allowing access to cars and not public transport. In theory this is acting as a barrier to a certain section of society i.e. those who cannot afford cars (or choose not to).

By excluding some aspects, the table itself will act as a barrier to a full picture.

Unfortunately this can result in an impact of a different nature, particularly where local government are involved. When a topic is excluded and moved out of the limelight, the funding opportunities often disappear with it! There is little investment in some aspects of forensic science, but plenty for DNA. For example, in the current set of national key performance indicators, there is no mention of the contribution made by chemical enhancement of fingerprints. All forces have an in-house laboratory. Some, like Studyforce's, are producing about 40% of the forces fingerprint identifications, a

substantial contribution. Others are making a much smaller contribution due to insufficient funding. In smaller forces they rely on national funding of specialist areas such as this to expand and develop services. By choosing to exclude this contribution from the national figures, they are effectively excluding it from potential funding because the spotlight is not on it. It has no medium with which to attract the government's attention.

Furthermore, to quantify the process, we are required to classify processes and techniques. Which boxes we place things in may differ between people or affect results e.g. how things are categorised as crimes and what crime type affects both a force's results and the public perception of results. One of the current general election fighting grounds is violent crime and how to reduce it. Previously, domestic violence would not have been recorded as a crime. Now it is recorded as a crime of violence and the environment is such that women feel safe to report such events and be taken seriously, be protected and helped. In black and white figures the perception is that violent crime rose steeply, but much of this is the change in recording procedures, the increase in those willing to report it and if, and, how a crime is categorised or classified.

"Society prepares the crime, the perpetrator is only the instrument" (Quetelet in Hacking 1990, p116).

It can be shown therefore, by using Latour's notion of 'circulating reference' how an object, for example this thesis, is constituted in and by chains of translation. It has been demonstrated how this will have occurred by taking the physical aspect of the

situation and converting it via transactional steps into a much more flexible item that can be easily converted for other uses such as documentary purposes, whilst also giving a much wider overview of any patterns occurring that would have remained hidden by concentrating on the physical scene only.

Engagement with the real inspires Latour as it inspires me. Having examined a number of his readings during the compulsory element of my post graduate study, I was keen to study his work further in relation to the case study.

Returning to *Aramis or the love of technology* (1996), Latour also explored aspects of project management and the effect of the different types of aspirations on a project. Elements of the project worked together and clashed at various stages, in the end culminating in the perceived failure of the project despite some real progress being made in design in a very short period and with a limited budget. The text explores the project from a number of different aspects and we will be returning to explore this more deeply in chapter 5.

2.6 On comparing or otherwise Actor-Network Theory and Soft Systems Analysis

Both Soft Systems Analysis and Actor-Network Theory attempt to clarify or define a

problem, situation, project or aspect of change. Both have issues over exclusivity.

Where do you draw the line on what is included and what is not?

""But I thought we had to take everything into account.."

"Few things are coming together, on the contrary; they're rare and fragile filaments, not big bubbles to be tied together by big arrows. Their extensions are unpredictable, it's true; their lengths as well. And they are heterogeneous. Maybe we'll go to South Korea after all, or we'll go to see Reagan, but simply because the Aramis maze will oblige us to draw a picture of that corridor of its labyrinth, and because an Ariadne has slipped her thread into it, not because we have to take into account the international element, or the technological infrastructure."

He even obliged me to observe for myself that the violent blow he struck with his fist on the desk had no visible influence on the chapter of Aristotle's *Metaphysics* that was filed under the letter A at the top of his bookshelf.

"You see: not everything comes together, not everything is connected."

After that interesting physics demonstration, he harangued me again about the notion of networks. They were all fanatical about networks in that shop."

Latour (1996, p152-153)

In ANT, the networks are ever changing and therefore what do you include or not. Likewise, which SSA systems do you include or not? How do you ascertain how influential they might be?

Both paradigms examine a snap shot in time but the SSA view may be more stable in theory, as it looks at systems in place where as the ANT networks are always seemingly changing and switching.

Both paradigms also introduce the notion of a heterogeneous mix of elements. Within ANT this is held within the networks and all actants within the mix are treated the

same whether human, non-human, of political influence or not, whereas within SSA, elements are held within systems. SSA acknowledges the difference between these elements and that different perspectives, or systems, need to be viewed in order to get the fuller picture.

Neither paradigm explains how the systems or networks are realised, why they exist or how they work in relation to other systems or networks. In SSA the systems overlap depending on the system and creating subsystems, whereas in ANT they all exist at the same time and constantly change. They also both fail to provide an explanation for social processes, just describing them in the hope that this offers some clarity.

SSA states that Hard systems doesn't work effectively as a problem solving technique on it's own because of the human/non human interaction within the systems, which isn't taken into consideration through hard systems; it therefore needs the human element through soft systems. "It is not difficult to envisage the situations in both industry and the public sector in which the thinking about problems and problem solving would be significantly helped by models underpinned by hard systems thinking....But this image has never accurately described life in most organisations as most people experience it" (Checkland 1999, pA55).

In contrast, ANT argues that the difference between human/non human elements or actants is not relevant. What is relevant is how they work as an actor within the network, how they influence it and how they relate and interact with others.

Both paradigms aim towards giving a comprehensive understanding of the situation.

ANT is recognised generally as a more reflexive examination to see why things worked or didn't (although this is disputed by its key authors? In addition SSA works during the process to achieve an accommodation that everyone can live with. That agreement is not always forthcoming, but the SSA paradigm works towards a compromise that all can live or at least work with.

Both of the paradigms acknowledge that interrelated parts react in different ways and that diverse perspectives' are needed to fully review situations, but in different ways.

SSA does this through different potential system types and ANT through the different networks that fluctuate throughout the research.

On the surface SSA could have more simple flexibility; One can add additional systems if they become relevant. This appears more complex with ANT and that is potentially why it is better for review purposes, so you can focus on a snapshot in time.

In both the focus is on the sum of the parts to explain the problem situation fully, having dissected them initially.

In summary, although predicated on different basis, the two paradigms have similarities in how you conceive the project, with key differences, e.g. how they deal with the human/non-human issue. This therefore means that insight can be gained by the use of both techniques by firstly emphasising the human elements via SSA and secondly de-humanizing the project through ANT, comparing the results and

potentially finding methods to resolve any project problems and gain consensus from the stakeholders to move forward.

In terms of this thesis, all of these claims can be explored in different ways. As a collection of hypothesis, Checkland's methodology can be critiqued and the validity of his theory reviewed. At the same time, the author will develop her own set of hypotheses as a result of the detailed empirical investigation of the situation and the theoretical insights available.

This will take the form of documenting the changes taking place within the force, staff reactions and the interactions played out in the process or likewise, involve speculation as to how the decision to make use of the methodology came about and therefore whether it would equally suit another force's situation.

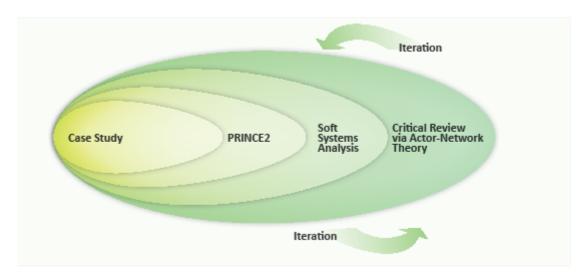
The theory will be applied to a frozen period in time that will have been preceded by other translations and will be further fluctuating and changing.

### 3 Methodology

The purpose of my research was to examine how a project management technique, a problem solving methodology and an organisational studies theory would shed light on project management and the handling of change. How do they give clarity or otherwise to the situation? How would they affect the actions of the project manager?

### 3.1 Research Method and design

The research for this thesis is carried out using qualitative analysis in the form of ethnographic research. The author, when faced with a genuine change process that was occurring in her organisation, wished to gain an insight into that process and potential ways of examining and dealing with it. This was done through a combination of at-home ethnography, unstructured interviews and documentary data collection via the organisation intranet; meeting minutes and official reports and publications. In this way triangulation of the data would help to improve the integrity of the findings. This is examined further in section 3.6 of this thesis 'Data Objectivity and Trustworthiness'.



**Diagram 12: Method in Action** 

It can be seen from diagram 12 that the thesis development is an iterative process.

Firstly discussing the case study through the use of the PRINCE2 methodology,
secondly by revisiting the material using Soft Systems Analysis and thirdly by critically
reviewing the process and techniques through the use of Actor-Network Theory. Each
facet revisiting the scenario to build a fuller picture of the experiences held.

The period of the data collection is the central twelve months of the three-year project. This time frame was chosen as the most suitable, as during the initial stages only the most senior manager was involved and the author became specifically involved in this central period of time. Although many key events happened in the last twelve months of the process, in order to provide a detailed analysis a concise data collection period was selected. The past and future may appear within this thesis, but only as invoked during the study period. A final project update is given as a postscript to the research.

A positivist epistemology was employed on the project; with the standpoint that any data collected could be used to analyze the organisation as an entity in its own right and how the homogenous parts dealt with the change process. By treating the data collected as scientific knowledge, it is assumed that generalisations can be made as to how the force and other forces may deal with similar situations (Pugh 1983).

Methodological reflexivity was employed i.e. to monitor the behavioural impact of the researcher's actions on the social setting and documenting these effects in an effort to ensure that the organisation and subjects remain unaffected by the research (Bryman and Bell 2007).

On allocation to the project, force policy dictated that PRINCE2 be used as the project management tool, but after examining the process and project documentation in detail, it was realised that the process fell short in managing particular aspects of any project e.g. people issues. The author set out to use a further existing technique, also predicated on systems methodology, to examine if it could be used to manage the

people issues more effectively than PRINCE2 and if it was still a valid technique in this current live environment and timeframe.

Soft Systems Analysis was chosen as a reliable, well tested paradigm that also sat comfortably within the mindset of a hierarchical organisation such as the police; one which predominately runs business as usual as a set of systems and procedures.

Daellenbach and McNickle (2005) also conclude that it has stood the test of time and is rigorously based in terms of its theoretical systems premises and underlying philosophical reasoning. The author, having previous knowledge of this technique through earlier undergraduate studies, also felt comfortable with its use as a comparative technique to PRINCE2. The use of Soft Systems Analysis commenced at the beginning of the case study period, approximately twelve months into the project.

In Chapter 5 of the thesis, as a contrast, Actor-Network Theory is used to reflect in detail on the success or otherwise of the project. This was carried out after the case study period was completed, the data had been analysed and reflection on the case study material was taking place.

# 3.2 Organisational Ethnographic Research and Participant Observation

Organisational ethnography can be described as the ethnographic study of organisations i.e. a systematic description of the people and cultures contained within it, but also its organisational processes (Ybema et al 2009). The aim of this type of fieldwork is to get close to those being studied and document issues first hand. This is important because it gives insights that may be missed through other research

techniques. Interviews for example can be problematic because of their context within the setting and cultural script-following (Alvesson 2009). It can be seen for example, how interviewees may be uncomfortable in an environment such as a police force, where interviews are used as a formal method of recording the occurrence of criminal activities! This may indeed lead to script-following as an interviewee is careful to say what they think should be said rather than provide an honest interpretation of the situation.

An ethnographic approach was employed on the case study by use of the position of the author within the organisation. This allowed the necessary access to the project environment and activities, but also access to a rich variety of documents from within the force. Ybema and Kamsteeg have proposed that "immersing is generally acknowledged as a central feature of good ethnographic field research" (Ybema and Kamsteeg 2009, p101) and therefore there is a strong argument for its use in this thesis in place of disengaged organizational ethnography. In sharp contrast, warnings against getting too involved are prevalent and "making the familiar strange rather than the strange familiar "(Van Maanen 1995, p20) is key in the strategy of the ethnographer. During the project we have gone some way in attempting to achieve this by visiting other forces and organisations and looking at the other ways forensic examinations are carried out and how other organisations are set up to maximise their efficiency. In this way one draws away from seeing the familiar methods and assuming they are the best way forward.

As a research method, ethnography can raise many issues over the objectivity of the observer. Some of these have been discussed in relation to the case study throughout this thesis, but "observations of naturally occurring events avoid – or, more usually, reduce- the researcher's dependence on the accounts of respondents" (Alvesson 2009, p158). In other words, even just my presence in my own working environment will generate data for the case study, as naturally occurring events such as planning permission or the force's decision to use a particular location will occur naturally and can be documented. As will be seen throughout the thesis, I have chosen to employ multiple methods in order to a build a richer picture of events (Alvesson 2009).

The disadvantages of ethnographies include the fact that they can be time consuming and I would argue potentially never ending, as it is difficult in some situations to know where to set the boundaries. In this case study for example, one could argue that the full project period should be covered for a comprehensive overview of the entire project. This would naturally lead to another disadvantage of ethnography, which is the vast amount of ethnographical material that is collected and reviewed. It is the reason I decided to restrict the case study period to twelve months, as three times that information would have been too time consuming to handle and potentially not feasible to be reported on in a document with a restricted word count such as this thesis. We have chosen a specific type of ethnography, that of at-home ethnography (Alvesson 2009) to ensure that our place in the observation is clarified.

Alvesson (2009) discusses specifically the difficulties of studying the 'lived realities' of one's own organisation. He proposes at-home ethnography as a response to this,

which aptly describes the author's situation during this study. "At-home ethnography is a study and a text in which the researcher-author describes a cultural setting to which s/he has a 'natural access' and in which s/he is an active participant more or less on equal terms with other participants." (Alvesson 2009, p159).

Participant observation is a technique of field research, by which an investigator studies the life of a group by sharing in its activities. By its very nature, it can provide a unique and detailed insight into the daily activities and conversations during a study. This has been particularly so in this case, as the observer has been an integral member of the team for many years and therefore well known by the other members of staff.

Unfortunately by being so close to the work and participating as the project manager, the researcher can potentially find themselves quickly losing control of the project by focusing too much on research and not on the project itself, creating additional stress to both the researcher and those going through the change process. Distraction caused by the volume of work and types of task dealt with, can also become an issue to the researcher. During the whole of this project, the full forensic process had to be kept fully operational and as will be seen during the project snapshot, the author was also committed to maintaining a long term strategic view on her own department, which often offered distractions during the period.

One potential advantage of At-home ethnography is that it reduces the impact the observer will have on what happens. As the project manager of the construction work, other participants being observed soon forgot that this was forming part of the

observer's study. This was evident to the author by the perfectly usual behaviour exhibited by her colleagues (as opposed to a more cautious guarded behaviour she would have expected if they were conscious of being observed). By being integral in the process, those being observed were concerned primarily with information about the project and not what was being recorded. The author was careful to make notes as often as possible, but not necessarily in front of those being observed, in order to reduce the impact of being observed.

Friedrich Nietzsche (2009) believed that all observation and interpretation is coloured by unavoidable presuppositions and bias, but that although there is no such thing as an objective view, objectivity can still be attained once a certain value or end has been established. Bias may shift the chosen material for the project and invariably influence the perspective of the researcher. In his work Genealogy of Morals (2009), he discusses the benefit of taking different views that may not be fully objective, in order to give a fuller picture of the accepted view of a situation rather than assuming one can achieve pure reason and absolute truth. Nietzsche's argument is that we can only hope to gain anywhere near objectivity by gaining multiple and as many aspects as can be gained on a matter. It can be seen therefore that it is imperative for the author and researcher to assign the value of objectivity to the material and thereby set out to achieve some form of objectivity at the commencement of the project. In this case study, although it is the author's belief that true objectivity would never be proven to be achieved, by using accepted fact that is obtainable by all parties through any shared public documents, one can establish the integrity and credibility of the findings. This can be reinforced by the demonstration of factual evidence of available

documentation. The reader also has the additional facility to cross refer the factual evidence with the diary content to come to their own conclusions about objectivity levels within the process.

#### 3.3 Police Ethnography

Ethnographic studies of work within the police exist (Holdaway 2003, Reiner 2010), but few examine how they handle organisational change, the most noted works currently being Loveday (2005), which examines force modernisation and its effect on police officers and was discussed in chapter 1.3. Other studies such as Young (1991) and Manning (1977) are focused on the social aspects of policing in the United Kingdom. Both studies examine how police work is dramatised and played out in practice.

At the time of writing this thesis, access to British police forces has traditionally been very difficult and we feel this is reflected in the smaller number of studies undertaken in the United Kingdom. HMIC have carried out a number of practical studies which provide insight into the police world, but not on a personal level. This situation may change in the near future due to the prevalence of 'fly on the wall' police documentaries currently being shown on television, which display a sharp change in attitude to sharing the activities of the police with a wider audience.

## 3. 4 Critical Action Research

Action research is an established, but somewhat controversial methodology. It is a useful method of research if, like the author, you are working in an environment

where change is occurring and you would like to view the issues involved. The research is carried out within the situation by the participants and forms part of their everyday work, ensuring that impact is made immediately (Somekh & Lewin 2004).

The technique allows practitioners to take a step back and reflect on their own processes by the collection and review of data as Schön (1983) discusses. This also means that action research will also always be rooted in the values of the participants (Somekh & Lewin 2004). It is important to accept this as part of the process and reflect on how this may 'colour' the outcomes, as it is impossible not to 'see' life through one's own experiences no matter how objective a researcher attempts to be. This is also true of the audience that the research outcomes are aimed at. Their perception of the results of the data collection will be different to the participants and, indeed, each other.

Action Research is usually not triggered by a particular research question, but rather by the practical need for change or improvement. It can give the participants a deeper understanding of a particular process or situation. Soft systems analysis is one model that can be used on which to base the research, a starting point or framework on which to structure the project. It was developed from the application of Action Research (Checkland 1981) and therefore its use within the Soft systems analysis also makes that an extremely practicable fit.

In this particular case study, the impetus for change came from a number of sources coming together to create a strong enough case for the police authority to act; the

need for new premises, reports recommending the co-location of particular departments and other factors. The move to the new building then consequently became the catalyst for the research and change. Having the opportunity to review existing processes with a view to streamlining them (duplication within some departments had been previously identified in a number of documents, including the best value review) and seeking improvement. Performance within the departments was already good, but there was a vague feeling of dissatisfaction and the definite belief that with more modern facilities an improvement could be made. Some processes, particularly within the laboratory, were determined by the physical restrictions of the building, and had to be maintained that way for many years, because there was no additional room to co-locate related processes in the existing facilities. The accommodation offered the opportunity of determining a better way of physically moving things around the whole process. This general dissatisfaction came from a number of sources within the various departments and therefore gave substantial impetus for change. It was in light of this that the project was chosen as the author's case study and developed into this resulting thesis.

Sykes & Treleaven (2009) discuss the inherent dangers of the use of action research, but suggest that it also potentially generates a range of data which can be widely disseminated. In this vein, it is considered by the author that one particular approach to action research will act as a useful insight during the research process and in writing up the findings generated.

Marshall and Reason (1994) discuss an approach to action research that has particular value in work within organisations and therefore this case study. "All good research is for me, for us, and for them: it speaks to three audiences....It is for them to the extent that it produces some kind of generalizable ideas and outcomes...It is for us to the extent that it responds to concerns for our praxis, is relevant and timely...[for] those struggling with problems in their field of action. It is for me to the extent that the process and outcomes respond directly to the individual researcher's being-in-theworld." (Marshall and Reason 1994, p113). It can be seen in this way how the methodology would have benefits for all parties in the case study; general project knowledge for the organisation and world in general, the potential solving of the conundrums being examined within the Scientific Support Department and an improvement in the author's skills in project management.

The layout of the thesis reflects this choice of methodological approach; Them, through the critical review process and the thesis's publication. Us, through the process itself, and the resulting blueprint for the new building and services and finally Me through my experience gained during the process which will enrich my role within the organisation and future research I may carry out.

It is considered therefore that the use of Action Research within the case study will generate a wealth of information which will benefit not only the academic community, but will also significantly enrich the knowledge and understanding of the author and her organisation; knowledge that can be used to good effect on future projects.

#### 3.5 Ethics

The understanding of research ethics plays a huge part in a study such as this. When we are close to the other participants within the study e.g. work colleagues and may well continue to be so after the study, thorough consideration of the ethics of any observations made, recording and writing of the case study material and their use should be given, as in any research project. The danger is that familiarisation of both parties can lead to disclosures that might not otherwise be made to an external 'stranger'.

Four key ethical principles were set out by Diener and Crandall (1978): Harm, lack of informed consent, invasion of privacy, and deception.

#### Harm

It is, of course, unacceptable ethically to carry out research practices that will harm subjects, but harm can take more than the most obvious form of physical abuse to achieve an end. The manipulation of subjects e.g. by engaging in a relationship in order to gain 'insider' information is also a form of harm. Bell and Bryman (2007) argued that researchers should be open and honest in their research and communicate to those involved the extent and nature of the research so as to fully inform potential participants of the full extent of their involvement. In this way, the implication that a relationship has been developed to gain 'insider' information that may harm the subject is avoided through openness. In an environment such as a police force this is especially pertinent, as any unethical form of research may cause a potential disclosure of information affecting legal cases or indeed potentially acts that would be

considered inappropriate and result in the loss of employment. This was somewhat counteracted in the case study by the fact that the author was an established member of senior management and therefore the subjects of the study were in an existing relationship where the line of appropriate behaviour was clearly set out. This could of course conversely mean that a certain percentage of communications and feelings were held back in order not to compromise a subject's position within the department.

"The AoM Code of Ethical Conduct states that it is the responsibility of the researcher to assess carefully the possibility of harm to research participants, and, to the extent that is possible, the possibility of harm should be minimised" (quoted in Bell and Bryman 2007)

It is with this in mind that the ethnography sought to incorporate a commitment to anonymising the force and its participants; firstly, for the force in order to protect them from any harmful publicity resulting from the study. The final project was extremely successful and therefore the force may later feel this is an unnecessary protective step.

And secondly, to the individuals involved in the case study, who we wanted to feel free to speak openly about the process without fear of reprimand.

#### Lack of informed consent

Lack of informed consent can lead to a number of ethical issues, such as the moral implications of covert observation. The author would not have been allowed to carry out a study of this nature with out the consent of the force and participants. Further to

the issues discussed above there would also be data protection issues where unknowing participants may disclose information which should not be included in the study, e.g. the names of people with criminal records or on the sex offenders register etc.

## **Invasion of privacy**

Research should not intrude on a subjects privacy except where that right is expressly given, a prime example of which are the current 'fly on the wall' documentaries sharing the life and troubles of celebrities. The MRS recommends that each subject is treated individually, as what may be considered generally as not private subjects to most, may still be private to others (Bryman and Bell 2007)

During the case study, the author generally did not observe areas of the participants' private lives, other than when invoked through conversations about additional travelling times to site or working hours that may affect childcare arrangements. These issues were treated with respect when broached upon, as were any areas of work life that were considered a private matter by the participant.

# Deception

When a researcher implies that their research is different to what it really is, or the outcomes may be different, they are deceiving their subjects and this is ethically unsuitable. This is particularly the case where the researcher has authority, as in the case study. As a member of the senior management team, the staff were potentially likely to agree to being observed, purely because of the author's authority level. This

was avoided by being entirely open with the research participants and fully informing them of the reasons for the study. They were naturally suspicious that there was more to the study than we were revealing, but by fully briefing them of the techniques being used and the intentions of the research they were willing to participate and hoped there would be some natural benefits of the process from the increased scrutiny of the situation.

Further to this, in a performance monitored environment such as the Police Force, it is indeed better to disclose the benefits of participation in the research in order to mutually benefit both the richness of the research and the efficiency of the organisation (Bell and Bryman 2007). The force were not only interested in seeing the results of our findings in order to improve the management of change, but the participants appreciated the fact that the author's use of these techniques was not force policy and therefore what was happening to them was being monitored more closely and therefore may be dealt with more effectively as a consequence.

#### 3.6 Data Objectivity and Trustworthiness

As has been discussed previously in Chapter 3.1, during the empirical research, it would be extremely difficult for the researcher to abstract herself entirely from the situation and the world, as they were employed by the organisation, and had been for fourteen years, and this may 'colour' the abstracted viewpoint too clearly. The author was allocated a police supervisor within the organisation to ensure that a balanced view was taken of the customer's requirements from an operational aspect, as well as within the central departments providing the service; but it will require a certain level

of reflection in order to examine the data collected through shared public documents and examine how it relates to the overall comprehensive analysis. By contrast this also allows us unrivalled and unlimited access to the subject and the organisation, gaining the ability to give an in depth study of the process and a richness that may not otherwise be available to an external researcher.

The attitude of the analyst is key in order to fully record the process and develop a view on information that has been accepted as having happened during the case study period by the staff involved at the time e.g. through both formal and informal shared public documents. With respect to Checkland's methodology, this is made easier by removing the situation comparison into the systems world and therefore helping to distance it from the real world. This will be explained in more detail in section 2.4.5, but given that the force and Scientific Support Manager have specific strategic criteria to be met and have documented many physical problems of the current situation, such as disparate locations, it should be possible to give a comprehensive view through these public documents about the comparison itself and in isolation. The comparison therefore is of that which is documented as existing currently and the situation which the force requires in order to carry out its activities more effectively.

In order to distinguish more clearly between the actual and personal interpretation, the case study has been divided into two clear accounts of events; a personal description and diary of events from the Project Manager and a factual record of events as held by meeting minutes and other documentation. This is not to imply that the personal view is incorrect factually, but it is based on feelings and impressions of

the way in which the process of change was transpiring. Nor is it to be implied that the way in which the factual element is written will not be coloured also by the author's own experiences and views, but they have been separated in order to achieve more clarity to the differences, and or similarities between them. Through this merely demonstrating two views of the same reality.

The writings contained in this thesis take two forms. The diary consists of 'confessional tales' i.e. a personalised account, warts and all discussing the observers feelings and opinions openly. The rest of the work is 'realist tales', a dispassionate third person account of the project, the reflective practitioner in action (Bryman & Bell 2007). The views are not only separated physically within the case study snapshot, but also throughout the text, where relevant personal experience is indicated by the use of the font *Monotype Corsiva*.

#### 3.7 The contribution of the thesis

This thesis makes significant empirical, conceptual and methodological contributions in exploring our understanding of public sector organisations, specifically the police, in addition to the methodologies and their use in this context. It makes its threefold contribution in the following way:

Firstly, as discussed during the literature review, a number of ethnographic studies of work within the police exist, but few address how the police handle organisational change. The current emphasis up to the time of writing has been on commitment (Metcalf & Dick 2000) and service modernisation such as the introduction of Police

Community Support Officers (Loveday 2005). Whilst Loveday does discuss the introduction of reforms and therefore change, this is not examined through an ethnographic study. This is a current gap that this thesis seeks to address. The empirical work in itself is the writing of an original and unique record of changing events within the Police Force.

Secondly, the comparison and critical engagement of the techniques Soft System

Methodology and Actor-Network Theory add to the knowledge developing within the literature covering these paradigms.

Finally, the complex combination of these two paradigms to review the case study data provides an original synthesis of concepts that add to the wealth of literature covering these subjects.

This thesis also brings a significant contribution to knowledge in this field by examining these existing paradigms in a new way and an original ethnographic case study.

# 3.8 Defining the Scope for the Study

"It is recognised that the service provided by Scientific Support including the functions of PNC and Central Information Unit are specialist areas staffed in most cases by experts in their own fields. This future vision seeks to maximise their potential to provide an optimal contribution to the common aims of the force"

DCI Scientific Support, Studyforce,

The Weston Project- Scientific Support - The Way Forward 2004, p1

One of the current priorities of the Government at the time of the study was to provide a more integrated use of DNA and other scene of crime techniques as part of a Forensic Integration Strategy, with the overall aim of reducing all crime (Home Office 2005). This could be achieved, in part, within each force, by developing an individual strategy that met both Government and local policing needs. No further definition than this is included in the strategy; so much is left to the interpretation of each force. The annual funding is also supplemented during some periods with government finance for specific initiatives e.g. the additional funding was available to expand the number of profiles on the national DNA database previously mentioned.

Scientific Support itself has to meet the requirements of any strategy developed by their own management, but also from an intermediate level of management, which for example develops the strategy for major investigation. Fortunately all of these aims are developed from the Government diktat and therefore usually correlate with each other fairly well. The higher the level, the broader the description of the aims and strategies, for example, Crime Support's, of which Scientific Support is one department, aims derived from the national aims expressed in the National and Local policing plans are as follows:

#### "CRIME SUPPORT AIMS - Where we want to be:

Crime Support will deliver first class specialist services contributing to the

Studyforce's goal of becoming the "Best performing Metropolitan force in the

Country"

To support the delivery of the Local Policing plan by acting as a centre of excellence in designated criminal investigative fields

To build on our successes to make the force area a safe, secure environment for everyone to work, live and travel

To continually assess and improve the services we provide to the force in line with the principals of 'Best value'

#### CRIME SUPPORT PRIORITIES - Where we will concentrate our efforts:

- Collate and use intelligence by tasking resources with clearly defined objectives
- Continue to develop both internal and external partnerships, which deliver results
- Ensure systems and expenditure provide maximum value in their outcomes
- Performance is driven by everyone taking responsibility for his or her contribution

66

Studyforce, Crime Support Policing Plan 2004-2005

These aims effectively supported the other plans without being too prescriptive and therefore allowing the individual departments the flexibility to meet these needs.

Ultimately, therefore, any new site would need to able to sit comfortably with the concepts devolved from these plans.

Summa (1992) argues that there has been a constant crusade against bureaucracy in the public sector on the grounds of a perceived improvement in efficiency and

productivity. It can be seen even recently in the police service that this is so, with the never ending battle to keep police officers on the street and not in the office filling in paperwork in relation to the crime they are either preventing or investigating. Even during the author's period of employment in the police, there were numerous initiatives in an attempt to reduce bureaucracy. It can be seen within the case study that Scientific Support also aims to reduce inefficiency through bureaucracy via colocation. In this case, there may well be efficiencies to be made through the reduction of duplication of services and the multiple handling of exhibits. The force can be seen to be avoiding labelling the changes as efficiency reforms, which is undoubtedly what they are, and instead targets them as better facilities and a nicer environment in which to carry out their processes. As Summa goes on to discuss, this turn of events has produced a rhetoric of managerial efficiency and there has been a notable change in some of the vocabulary in the force, particularly in Scientific Support. Members of the public are still just that, but internal departments have become 'customers'. This pursuit of the bureaucracy-free procedure is key to the vision and aims of the single site and its service provision.

Scientific Support aspire to being a centre of excellence, as this is seen as having 'kudos' within the world of policing and a specific field of work to be proud of, and therefore highlight. It is seen as demonstrating what the force is capable of, given the sufficient resources to start with a blank piece of paper and redefine their processes, including a building designed to carry out those techniques in the most efficient and effective way. As stated earlier, this, of course will also mean having flexible facilities

and well trained, committed staff. These staff need to be retained in order to develop experience which can be shared with junior team members.

Metcalf and Dick (2000) examine the nature of police organisational commitment. As they point out "Evaluation of commitment is a topical and important issue for police managers given the changing police context in the UK" (Metcalf and Dick 2000, p812) and this is also true in the case of major projects such as this, which seek long-term commitment from staff in order to fully develop the project vision. Metcalf and Dick also discuss the complex nature of the relational dynamics that affect individual commitment. Their findings show that how staff are managed and supported, and the way in which their performance is appraised, will all have an impact on their organisational commitment. It was considered that this potentially would also be true in respect of how they are treated during the Studyforce project, particularly how they are managed and supported. In some cases, commitment levels will fluctuate during the change process as these dynamics play out in individual circumstances.

As discussed above, the department strategy, which is released annually as a formal document, is an extremely complex decision making process, affected by many factors. Some of these include political issues relating to government finance, organisational issues surrounding staff levels and their deployment, as well as technical issues over available techniques, their success rates and how to make the most efficient and effective use of them. In essence then, a heterogeneous mix of 'hard' and 'soft' factors, composed of sometimes seemingly unrelated parts, and not necessarily of the same type, for example performance targets, technology and rhetorical issues relating

to effect, style or social standing in relation to other Scientific Support departments. It can be seen in the description previously given in the 'Case Study Overview' section 1.5, that the new site was seen to need to be developed to enable the organisation to, not only deliver the current strategy, but also put the department into the limelight as a centre of excellence in the provision of their service. Whilst a whole separate PhD could be written on what 'excellence' is, the chosen meaning to this organisation is a site that can offer, not only the latest techniques, but also evolve to take on new techniques as they are developed in the future, making them one of the national leaders in this field. It would be a site that the force could be proud of.

There were also some more localised issues behind the decision to develop a new site. A new laboratory was needed due to the poor condition and suitability of the existing site. The training facilities were also barely adequate, being based in a domestic house and therefore not specifically suited to the purpose either. Prime office space is very expensive in the city centre, so to occupy this with a photographic laboratory or fingerprint storage areas was very quickly identified as unsatisfactory. The organisation's aim was to move towards a purely administration headquarters, relocating any non-administration departments to alternative sites with better access and parking facilities, but away from the city centre.

When the project started, there were already some predefined criteria: the site location had already been decided upon, where an existing building would be refurbished and extended to meet the department's needs. All but two of the departments would be moving, although this sparked some debate as to whether the

remaining two departments should stay under the same banner or become part of a headquarters department, as neither department was scientific in nature. Ultimately the decision was made to move them into another department in order not to split the scientific support management across two sites. The existing building needed complete refurbishment and therefore could not be occupied prior to the completion of any other building work on site. The site was to be handed over to the construction company and in order to do this, existing staff from other departments needed to be relocated before the refurbishment could occur. A second building to the rear of the site would not form any part of the project, but also had to be fully vacated, as it was fed power and heating from the main building.

The development of a new site would give the organisation the opportunity to review the way each of the current sites and departments work. At the start of the project, they were all working as part of the 'team' but independently within their own fields. It was felt that this would be the ideal time to bring together the best working practices and experiences to develop the most efficient and effective process for the future. The organisation was required to ask itself "Is there a better way to deliver scientific support?" "Can the service delivery and customer satisfaction be improved? "This was in line with national requirements of offering better value to the public.

In the playing out of Summa's efficiency reforms (Summa 1992), the endless pursuit of 'better' can often demoralise staff who are already high performing. The pressure within police establishments nationally to always be 'better' than the rest is relentless, with national public announcements made in respect of good performing and bad

performing forces. This begs the question that even should the organisation achieve its objective, would it realise it? Or would it then just start pursuing an even better solution?

In the same way that continuous change can be seen to wear down employees, the endless pursuit of better can be wearying and will invariably bring a constant awareness to the department of their collective continual failure to perform well.

It can be seen that the Project Manager's role is somewhat similar to that of Machiavelli's prince (Machiavelli 2004) in that a number of options are open to a manager as to how they manage people involved in a project (the subjects). As Machiavelli subsequently states "One must be a fox in order to recognize traps, and a lion to frighten off wolves" (Machiavelli 2004, front cover), but also have a number of other facets to manage the delicate balance of the project (or principality). He discusses how a prince must regulate his conduct towards his subjects or allies. We revisit Machiavelli's prince during the course of chapter 5, but he states that the prince will be judged for various qualities which will earn them either praise or condemnation, and so it is with a project manager. Some qualities will be seen as benefiting the cause, whilst other qualities seen as grasping or working towards their own aims. Like his prince, it would be advantageous for a project manager to have all types of qualities in order to deal with people in a suitable fashion. This is rarely the situation, therefore a project manager or prince must be prudent so that they avoid such vices as would undermine their position.

There is a strong culture and pride in what is achieved within the police force (Metcalfe and Dick 2000), but in the authors opinion, that is not necessarily conducive to departments working together; quite the opposite is true, as there is also a tendency towards wanting to be the best unit, shift or department. Even within Specialist areas such as Scientific Support there is an inherent competition to produce the best results. This needed to change with the move to develop a stronger unit, not just the 'sum of the parts', but a fully integrated service that appreciated each other's strengths and weaknesses in order to hone the service and provide a more comprehensive, but cost-effective facility. This was promoted early on in the project, partly through the development of the vision together, but also by encouraging department managers to work together on particular elements of the new service.

This situation and the issues developing, were to form the basis of the project and therefore also the field of study. The scope is limited to the effects of this particular construction project on Scientific Support, its departments and staff. It is also limited to the previously stated time period of twelve months.

## 3.9 Data Collection and Analysis

Data analysis occurred through the critical review of the material collected, reflecting on the experience of the author and other senior managers to improve the quality of action taken on the project and the developing level of professional practice, as described by Schön (1983).

Collected material consisted of overt observations made, a personal diary of the Project Manager's experiences, informal interviews and meetings, plus formal meeting minutes and other official documentation, such as information releases via the force intranet.

Our day to day location was within the heart of the department. The author had an office which could be used for meetings, note compiling and interviews, and which was situated within a number of the departments at the headquarters building. The rest of the facilities, including kitchen, toilets and rest room, were shared and therefore facilitated an environment for more informal conversations and observations. Regular project meetings and visits to the other two sites were held to facilitate the recording of observations from these areas.

At the commencement of our involvement in the project, after being briefed by the Scientific Support Manager, a meeting was held with the force Project Support Department, who issued the force guide to project management *Managing Change:*Project Management Guide 1999.

During the course of the data collection period, the force annual Performance

Development Review (PDR) process was held and this gave further feedback on the project process via a formal interview.

Observational details of what was said and heard were noted at the first opportunity after the overt observation or conversation had taken place, in order not to disrupt the

flow of the conversation or activity. The diary was used to record personal observations and feelings about the progress of the project and others reactions to it. Information releases and press articles were printed and stored for future reference.

The data gathered was analysed throughout the case study period in order to develop the process further, for example in order to inform the production of the rich picture and the subsequent development of the conceptual modelling. A diary was kept by the author, which was updated on a regular basis with key facts, but also personal commentary in order to give an alternative perspective on events. These included informal comments made to her throughout the duration of the project which are interspaced within the text to add perspective.

Informal interviews were held at a number of points during the period, along with a basic questionnaire covering the staff's experience of the level of communication during the project and how it compared to other changes that had occurred to their departments previously.

The sample of staff who completed the questionnaire consisted of the consultation group and the project team. This was not envisaged as a sample group reflecting the whole project, but rather as a small sample of those involved closely with the project, who could reflect on the process with sufficient experience of it. For this reason, it can be seen that the information gained has been used only to inform the process and not purport to be a comprehensive view across all staff. By being sampled from a variety of roles within the project such as members of staff, senior management and the

project team, it does however still offer a variety of perspectives as Nietzsche suggests (Nietzsche 2009)

This data was examined using grounded theory as the predominant framework for analysis. Grounded theory is a theoretical approach advocating an initially atheoretical position in the field (Van der Waal 2009). The framework allows an iterative process to decide what data should be collected next, as shown in Diagram 12. It assumes that a researcher can never be fully prepared for ethnographic research as much is unforeseen (Van der Waal 2009). This was also driven by the specific needs of the paradigms employed. During Stage 2 of Soft Systems Analysis, tools such as SWOT were employed in generating potential names for relevant systems and therefore directed the subsequent way in which data collection was taken forward and which areas further data might be needed from, e.g. the different departments and specialities. Some of these facts may have been known in advance, but the intricacies of any inter-dependence may not. The areas of data collection were subsequently further developed during Stage 3 and 4 during modelling in order to inform the process and generate the best model for comparison.

In addition to the data interpretation carried out using the techniques themselves, the project has been critically viewed through the use of Actor-Network Theory and Latour's text *Aramis* (Latour 1996).

Finally, I have compared the experiences of using the two paradigms and the insight gained from this use. The process of data interpretation is examined in more detail in Chapters 5 and 6.

### **4 Twelve Month Project Snapshot**

As discussed in the methodology chapter previously, the twelve month ethnographical snapshot ran from January 2005 to December 2005 inclusive and commenced sometime after the project had been underway. In order to cast an alternative view on proceedings during these twelve months, the following text also includes extracts from the author and project manager's personal observational diary during the period and will give the reader the opportunity to reflect on the story in the author's own words before moving on to the critical review set out in Chapter 5.

#### In the beginning...

A scoping document had been put together at the request of the Head of Estates in May 2004 to document the number of staff and levels of equipment that would be deployed at a potential new site. This document was very basic and broad-brush, but was used as the basis of an early costing of the work within the Estates Department. It was also used for further discussion during the first single site workshop, which was held on 14<sup>th</sup> June 2004. At this meeting, the department managers started to discuss the basic format and needs for the physical layout of the whole site, e.g. both of the laboratories needed to be either on the ground floor or a goods lift provided for the movement of heavy exhibits such as machinery and containers of chemicals. It was, in

essence then, a framework or skeleton on which to develop the new site and service concept. An effort to gain a special awareness of the layout needed.

The author's involvement with the project up to January 2005, had been the same as the other department managers, giving an idea of the sort of space and layout required by her department in the new site. Whilst this still offered a useful contextual viewpoint, the management of the project was carried out by the Scientific Support Manager and the entire decision making and planning process was also being managed by the Scientific Support Manager during that period. In those early stages, the potential for a new site was still very much a concept, and having gone through the process on a number of occasions previously, this appeared at face value to the staff and managers to be just another planning exercise that would probably be too expensive and come to nothing. This had happened on numerous occasions over the preceding years. At that point none of the managers were convinced that the project would progress and, therefore, this might suggest that they were still rather cynical and that these and any initial tasks may have been regarded as low priority.

In October 2004, the author was approached to act as coordinator on the project to give a stable point of contact for the various companies that were now involved in the work, such as architects and quantity surveyors. The Scientific Support Manager was often out of the building, and indeed the force, on other projects and therefore to prevent any delays in data collection, the author was to take this role for three days a week, continuing with departmental management for the other two days.

It soon became apparent that this would be impractical, particularly whilst the author's own department was located four miles from the project base, and consequently a member of staff was temporarily promoted to supervise the day-to-day issues whilst long-term strategic issues remained dealt with by the author, as they invariably involved the new laboratory and the service that it would provide.

The first task needing to be executed was to bring together the requests for space and manage any technical issues arising over co-location of various departments and pieces of specialist equipment. Further to this, during November of that year, a series of visits were arranged for the architect, mechanical and electrical engineers to have a detailed discussion within each department to verify particular technical requirements such as air flow management and floor surfaces. Another purpose of these visits was to see how each department worked at a practical level and where systems currently did not work at their most efficient and could be improved via the building design. The results of these visits were a comprehensive set of plans that were then discussed in further detail with each department manager to confirm their suitability and practicality of design.

In December 2004, the project board was set up, consisting of senior police and Scientific Support management and specialists in information technology, health and safety and finance. At this stage, there should also have been a Personnel Manager, but the post was vacant and therefore no-one attended at this stage to represent this department. This board would meet monthly and expect progress reports from the project manager and the design team, which consisted of the architect, structural

engineers, mechanical and electrical specialists, property services manager and subsequently the constructor of the new facility. Later in the project, updates would also be required by the information technology expert, Personnel Manager and the Finance Manager. Overall responsibility for the project within the force would fall to this board and its chair, who was Assistant Chief Constable (Crime) and ultimately responsible for delivery of Crime Support to the force. These meetings were designed to highlight at an early stage if matters weren't being taken in hand promptly. It was the force's opinion that the chair was in a senior enough position to have influence, where necessary, to ensure the overall completion of the project. As previously discussed, the board was also set up to comply with force policy on project management.

### "Policy

The Executive of the project board will usually be a member of policy group (OCU Commander or representative for local projects), who will form the board by identifying a user representative and supplier representative."

(Managing Change: Project Management Guide, Studyforce Project Support 1999, p17)

On Boxing Day 2004 a tragic event occurred in Asia. A tsunami struck the area and there were many fatalities. The Scientific Support Manager had been trained in setting up international disaster victim identification centres and was put on standby to be deployed to a site in Thailand for a number of months. As he was the Project Manager, the author was to be given the responsibility in his absence, should his deployment

happen, and preparations were made to ensure that suitable assistance from the department and the Programme and Project Support Department was given.

An appointment was made to see the Project Support Officer for advice. At this stage, the Design team meetings were being held fortnightly and the designs were progressing at a good pace, as per the design timetable, with feedback coming in from the various managers. The author also arranged to see a finance manager to calculate the current cost of providing the service from disparate locations. As the construction site was currently an existing police station, there were readily available figures for rates etc that could be extrapolated to examine the likely costs for the new site. Discussions were ongoing as to the cost of furniture and capital items of equipment. There was discussion as to the current equipment condition and its potential remaining lifespan in order to decide whether it should be moved to the new site or replaced. Some further new equipment to provide additional facilities such as a DNA examination room also required funding. The plans had not been released for comment to all staff yet as the approval process for financial aspects were still being considered and the Scientific Support Manager stated that he didn't want to raise false hopes too prematurely, having failed to secure funding at this stage during previous attempts to obtain a new specialist site.

In January 2005 the recording of events commenced after the return of all the staff from the Christmas period.

### January 2005

The first meeting was held with another emergency service to consider whether they wished to co-locate within the facility. There was a lot of initial interest in this, as their service fully complimented some aspects of the police service and may have led to advancements in both the force's service provisions via a 'joined up' approach. The meeting was very positive and both parties agreed to take the plans back to their respective senior officers. The Scientific Support Manager is keen to improve our partnerships with other emergency services where our roles overlap, so a consultation meeting was organised to discuss potential for co-location within the new facility

January 4<sup>th</sup>: Met the (withheld) service today. Very exciting, as this would be completely new to us and improve the way we and they deliver this bit of our work. They seem quite keen. Like us they will be moving somewhere as their current home is being sold. I think it's a shame. They are in a beautiful old building that's steeped in tradition and will probably end up being turned into a hotel!

As the author had to take a bigger role in the project, an appointment was made with Project Support to learn the guidelines and expectations in detail. She was issued with the Studyforce Project Management Guide. This had been written in 1999, but the author was informed that it was due to be updated in the near future; this did not, in fact, occur during either the case study period or the full project period, which ended in April 2007.

January 5<sup>th</sup>: Looked forward to today's meeting, but disappointed. I was hoping for some help along the way but (the project support officer's name) is very busy and can set me off but it's down to me

really! Bit of a worry as this is my first major project, but I hope they will be there if I need them and (Estates project manager's name) is very experienced, so I'm sure she won't let me make a mess of her project!

January 10<sup>th</sup>: Technical meeting held. Lots to get through; sockets, data, extraction systems etc. my head is spinning, but I'm learning about construction at an alarming rate! How to I get the other managers to understand that we need to get this right in the early stages, as there is not much chance of changing things later. Most of them still haven' accepted this is happening really yet!

This is a huge opportunity for me and I don't want to get it wrong! Although nobody seems to be very interested in it at the moment, I know this will be very high profile when it gets nearer completion as it is such a different and special idea. My worry is not only that I, or it, will fail at some point, but also that it will be even higher profile if it does fail!

A meeting has also been held to have a preliminary look at the mechanical and electrical aspects of the site e.g. specialist lighting and ventilation along with data requirements. It is hard at this stage to envisage the new departments and their expectations, but important that we all concentrate and think in detail about what will occur in each room. Even at this early stage the project team are asking about numbers of sockets and other details.

A visit was made during January to other specialist forensic units to look at contamination and presentation criteria for evidence. This was to ensure that DNA examination as an additional service in the new unit would not compromise other

evidence types, and to maximise the likelihood of any evidence submitted obtaining a DNA profile.

January 12<sup>th</sup>: We are considering co-locating another specialist forensic area at the site and I am sent to various locations to look at similar existing facilities to see if this will be feasible. At this stage, I still feel on the outskirts of the project because most decisions and discussions are occurring at a higher management level and little information is filtering down, even to me. The department managers have been shown the plans, but they have not been released to the general staff for discussion yet, lest it gets their hopes up before final financial approval is gained. It leaves me fairly isolated at the present time, as I cannot openly discuss plans at this stage. This just adds to the mistrust and level of uncertainty amongst the staff as rumours abound.

January 13<sup>th</sup> Forensic Strategy Meeting held. This always terrifies me at the best of times! I, along with the other managers have to present our progress on items in the forensic action plan. There are some for each department, but now I have the project too! It goes well though, so a good day! It's too early to have wrecked it yet!

January 14<sup>th</sup>: Meeting with Finance department on the process for requesting Specialist expensive capital equipment. There is a bid deadline, and I have to produce a bound document for the tender process. The metal dep is an expensive piece of kit, so we must get a good price.

January 21st: Project round up meeting to review capital bids and furniture and to clarify what is to be provided for from each budget. So confusing! Some furniture is part of the project, some we have to get out of our budget and some will be recycled (I'm sure that won't go down well!). Capital bids are far from being a done deal, so I'm still keeping my fingers crossed that we'll get what we need (I have put in for some new, very expensive lab kit, so I'm particularly worried!)

January  $27^{th}$  Technical meeting held. These are now every two weeks and we need them! I'm still wrestling with clean room specs etc.

January 28th Furniture meeting held. Today's meeting was in the lab, so we could list any furniture that can be recycled at the new site. We are going to have fitted benches, so I'm hopeful that most of this old stuff will be used elsewhere as it's falling apart!

#### February 2005

As part of the work developing the laboratory plans, the author visited a number of existing facilities in other police force areas to ascertain how much space was ideally needed for the facilities and the type of specialist equipment required in additional to the current facilities. This continued during February, along with detailed discussions to allow the alarms and access security in the building to be designed. Some further, regular, technical meetings took place to allow continual development of the plans, and potential processes that were to be carried out in the new facility.

Finally, during this period, the Scientific Support Manager was officially requested to work in Thailand. As expected, the author took the helm as Project Manager.

In February 2005, the project took a new turn. After the Tsunami disaster, the Scientific Support Manager is seconded to set up the victim identification unit in Phuket and will be working away from the organisation. The initial abstraction is expected to be at least three months (yipes!). I am made temporary project manager to give as much continuity as possible, but still in addition to my own management role, and still three days a week. The organisation still does not feel it is cost

effective to send me on a PRINCE2 course, how frustrating! I suspect this may have something to do with my being sponsored by them on my PhD, too much of the budget on one person? I have no proof of this, but it isn't a huge budget, I know.

Shortly before this event, a temporary senior manager is recruited in to manage operational projects involving the department and she then takes up position as the acting Scientific Support Manager. This works extremely well as she is proactive and maintains a high level of involvement in the project, helping to underpin the existing development work. I think she will be great for the project. Before he leaves on secondment, my manager briefs me in respect of the project with a level of uncertainty and cautions me that he has been a fair way into a major project before and still failed to jump the final financial hurdle to get the project underway and not to be too disheartened if this occurs while he is away (now he tells me!). At this stage, it is still unknown when the decision is likely to take place, which is adding to the unease, particularly mine. This is one of many possible problems that the project may face with the project champion at senior level not in a position to keep the momentum on the project.

During the annual Performance Development Reviews (PDR's), the author gained a useful insight into how the staff were feeling at this stage of the project. The reviews consisted of an informal interview and discussion of approximately one hour and allowed the author the opportunity to broach the subject of the new site and what it meant to each individual.

February  $8^{th}$ : PDR's start today. I both love this process and hate it! There are so many to get through that I am doing them all day for a few days, but they are the best chance I have of gauging opinion about a whole raft of things including the move. I always give everyone the time they need

and encourage them to be honest about their year and the achievements they've made along with the disappointments. I then also give them my assessment of their performance during the year, so we can plan training etc. for the next year. It's tiring but rewarding. I had some of the more vocal staff in today, so a mixed reaction, some very negative, even suggesting that they will leave. It's going to take a lot of hard work to change some of their minds, if at all.

February  $10^{th}$ : PDR's plus tech meeting. More positive from the PDR's today! Some very excited about a new lab, which we've been promised for years! One lady was concerned about her child friendly hours, but I was able to reassure her that these would still be in place, but would be reviewed prior to the move, just to ensure that she could still achieve them with changed travel times/route etc.

There was, understandably, a mixed reaction at this stage. A number of the staff had been employed in the laboratory for many years and had seen the various announcements and plans to develop a single scientific site come and go over the years. These staff were enthusiastic about the possibilities of the concept, but equally wary that this was just another pipe dream. The newer staff were generally positive as there was no doubt that new premises were needed, and it was hoped that this would improve the working conditions and also increase the variety of treatments that could be offered. These included DNA, fibre and blood searches.

February 4th: Alarms planning meeting. Wow! I must have taken our security for granted as I never realised how complicated it is! Where the zones should be, who should have access to each/all, should we have ID cards to scan or pin numbers or both! I need a quite room now to figure out how I will bring all of this together from all the departments and get them to agree!

February 15th: Firearms visit. Very interesting day today, as I went to visit a firearms unit to look. at their facilities. It's also kind of reassuring to see other forces don't necessarily have sparkly new facilities, but still deliver a top rate service. Inspiring!

February 17th: More PDR's

February 22<sup>nd</sup>: Even more PDR's, very tired when I go home, but it's worth the effort.

February 23<sup>rd</sup>: After the initial shock of my role change, I now have to firm up some ideas for my thesis study on top of everything else! It is obvious that Prince2 is not even considering the people and I've already realised how stressful this change can be to them through this week's reviews and I want to do some research that will be a suitable subject to base my thesis on, but also benefit me in what I'm doing (and the force, who are sponsoring me of course). I've chosen Soft systems analysis for a number of reasons. I've used it before in my undergraduate studies, so I'm confident it will help me and cover the 'people' aspects and I've confirmed at today's meeting that it could be developed into a good proposition for my thesis.

February 24th: More PDR's

February  $25^{th}$ : Technical meeting. Looked at light specs and cover samples today.

The detail and intensity of the meetings is beginning to increase. The plans are being laid out for higher-level elements such as how the alarm and security systems are going to work in principle. The annual personnel development reviews have given me the opportunity to have proper one to one discussion with my members of staff in the laboratory about how they are feeling about the move.

Eighteen, one hour performance development reviews plus writing them up for the records. I feel strongly that it would not be fair for my temporary cover to do this, but it is absolutely exhausting on top of everything else. There is a very mixed reaction, with one or two looking forward to the new ideas and improvements in the building and one extremely negative and hostile view. This member of staff told me at that point that they would be leaving as they did not want to move to the new site. As an existing station, the building that is being used for refurbishment has its own reputation and I have been unable at this stage to convince this particular member of staff that it will be unrecognisable once completed. I am disappointed that someone is so uninspired by everything after we've all moaned so constantly over the years that the conditions in the existing building are not suitable.

The other managers have also received mixed feedback during this process, but not totally negative. Oh yes, and just for good measure, I am getting married in July and so my home life is pretty hectic too for the next few months! I'm telling you all this because real life isn't that simple and projects and change at work are one thing, but everyone has a home life that goes on regardless. I feel that I should document the major things going on in my life, so that these things can be considered if possible and taken into consideration when dealing with change.

## March 2005

During March, collection of feedback and information from other sites continued. The plans were officially released to elicit feedback from the departmental staff via a manager's meeting. Some staff were part of the original design process, particularly in the specialist laboratories, but office-based staff were seeing the layouts for perhaps the first time and it was necessary to collect their further feedback about the practicalities of the plans and the way their departments were changing, both in layout

and services. In the case of the administration staff, this also meant changes to their role as services were amalgamated within the building. There was no threat of redundancy or of moving away from the site, as the unit still needed more specialist staff than were currently employed. This included the administration staff who, unlike other police administration staff, also dealt with the submission of exhibits and their continuity. Full consultation with all of these staff was carried out to develop this service and ensure that the right grade of pay was being paid for the more advanced, devolved role.

Each department manager was tasked with producing a detailed process map of every process in their department. In this way they could be reviewed and the processes amalgamated or streamlined once co-located at the new site. This would also act as a double check to ensure that all of the equipment and processes had been considered on the room data sheets and that each manager had considered fully the consequences of the move to their department.

March 14<sup>th</sup>: Technical meeting. Talked about the garages and their conversion to examination bays today. Need to confirm which ramp type is safest, so I've arranged a meeting with our garage to look at some! Can't wait!!

March 18th: Garage ramps! In order to be fully conversant with vehicle ramps and garage equipment, some of which will be required in the examination garages, I attend a demonstration at the forces main vehicle repair garage. This is extremely boring, but very useful, as the technicians have a variety of ramps that have been installed over the years and are keen to show me the pitfalls of the various

models. In the end, it makes it very straight forward to pick the safest, most practical ramp for installation at the site.

March 30<sup>th</sup>: Crime Support Senior managers meeting. Another group I have to report progress to!

They are not as interested as ACC (Crime), as they are currently dealing with another major department move, that of the Major Incident Unit. (MIU) And see this as next year's problem. Nice to be taken seriously!

March 31st: Scientific Support Senior Managers meeting - copy of final plans issued to every department. The managers put together process maps to document their individual processes. We will be expected by the Scientific Support Manager, in his absence, to review them and bring the processes together where it is of value e.g. one photographic processing unit, whether traditional or digital. The managers are in agreement with this as being a positive move to improve the way cases are dealt with, except in the area of administration and submissions, which are currently combined in most departments. By losing the submission of items to a central submissions desk, they may also be losing the additional administrational support that helps to gel case information in diverse departments, therefore the managers are understandably more cautious about this. I get the feeling this may be a sticking point later in the process, as some managers are already getting defensive about their administration staff and why they need to keep them. From my point of view, I think it will be an ideal opportunity for those who want more variety within their administration role, as these new posts will be more developed. I don't know at this stage how the staff will feel, as the consultation hasn't started yet, but there will still be a need for some traditional administration duties (exactly the same as before) for those who prefer to stay as they are. One thing I've learnt as a manager is that some people genuinely do want to stay exactly as they are in their role and not move around in the organisation. This I have found to be not always due to apathy, but sometimes just due to the current circumstances in a persons life that requires stability.

#### April 2005

April 1st: Single Site Project Board. Always scary, as I have to prove we are managing things and have them in hand. ACC (Crime) is excellent though! Very supportive, even when asking probing questions. It gives me more confidence that I won't miss something major along the way. He's even talking this early of the IT installations and how it will be best to allocate overtime, so that the IT technician and our staff can complete the move the best way without reducing service to other departments. That's forward planning!

April 4th: Technical meeting. Data sheets are drawn up by each department manager to list the exact technical requirements for every room, including expected furniture requirements to enable accurate costings to be drawn up. Because a number of technical departments are involved, this does not just include standard office furniture, but also laboratory furniture and specialist pieces of equipment. This part of the process needed to be taken seriously as these plans would be what we end up with if the project goes ahead. I sense some reluctance at this stage, after all, we have been so far along the process many times before and it is difficult to get any momentum going. Staff consultation is only within individual departments at this time and within some more than others, depending on the level of confidence in the project. As the manager of the laboratory, but also the project manager, I am keen to take the process seriously and engage everyone in designing their perfect laboratory environment. As we are currently housed in a Victorian three storey building, which we have grown to fill, rather than somewhere designed for us, it is not so hard to be enthusiastic here, but some are finding it so.

April saw further project board and design team meetings. New equipment was already being ordered or reviewed through the capital equipment programme in

preparation for the new site. This process was carried out very early as it could not be guaranteed that the purchase of capital equipment would be authorised at the first request. The author, therefore, recommended that the key requests were made in this year (making it clear that they were required late 2006/early 2007). This allowed longer term planning for the finance department.

April 5th: Final PDR's Hurrah! Finally through this year's set. Ended on a high with two positive views of the move and volunteers to help!

April 11<sup>th</sup>: Meeting with the Personnel Manager reference staff consultations. I am already aware of the rising personnel issues such as transport, parking etc and decide to have a meeting with the Personnel Manager about the format of the staff consultation process, frequency of consultation and other points. My feeling is that good, open communication with the staff will be key to making this move as painless as possible for everyone. She agrees, but progress is painfully slow when it comes to the bigger issues.

Continuous skips were delivered to the existing laboratory site to dispose of unwanted items. The site had been used for storing some furniture, etc, but much was unfit for use and the laboratory was being spring cleaned ready for the move. This was a time consuming matter due to the size of the building and small number of staff, and so was started very early in the process. This allowed a more accurate estimate of the space needed at the new site for existing equipment.

During this period, alterations were made at the station to house those staff being removed from the building that was later to become our construction site. Due to the

scale of the work, the whole site was evacuated and removed from police use until the work was completed.

April 25th: The skips are here! This is a great sign that things are moving and very therapeutic, clearing out all the years of junk that build up in cupboards and the basement. I think they must have saved everything, 'just in case'! The project is becoming more real for the laboratory staff as they are requested to clear rooms within the laboratory to temporarily house staff occupying the existing station that will latterly become our new home. This includes the relocation of some pieces of substantial equipment. We take the opportunity to clear a lot of old debris. The laboratory is in a Victorian station, which has stables and kennels, ideal storage for junk over the years, which has definitely been taken advantage of!. The building must be fully evacuated as it will be completely gutted and remodelled as part of the construction work. This is an emotional time, as the reality of the move dawns now that positive action is being taken to clear the laboratory. For some staff there are a lot of memories here.

There were currently a number of departments still being housed at the site, although the main operations and police service provision had been relocated to elsewhere in the area. The process had to be continually monitored, as people saw offices and parking becoming available and would have moved in, if not prevented from doing so! The work was not due to commence until October, so they saw it as an ideal opportunity to use the space. However, as the station was to be gutted, it was imperative that the building was fully emptied and this would take a long period of time, as the station has been operational for many years. Also, owners had to be found for various items of equipment that had been left behind over the years and needed reuniting with their owners!

April 27th: Crime Support Senior Managers meeting. Still focused on the MIU move, but at least I'm well prepared with information, just in case!

April 29th: Forensic Strategy Group Meeting. ACC (Crime) also looks after this, so he is easy on me today, as we have gone through the project in detail at the earlier project board meeting. Shame really, as I've done loads of prep work, just in case! Never mind.

### May 2005

During May, development work continued and a number of the laboratory staff attended a two day national police laboratories conference with a view to testing new equipment and techniques on show. This brought a certain level of enthusiasm, as the success of new techniques was revealed and a number of difficult treatment issues resolved, meaning some of the success rates in the laboratory could be improved at the new facility.

May 9th: Technical Meeting held. Exciting day! The architect produced 3D images of the new building! It looks very smart and scientific! Makes it all seem a bit more real. This is good timing as I can use them for the consultation day.

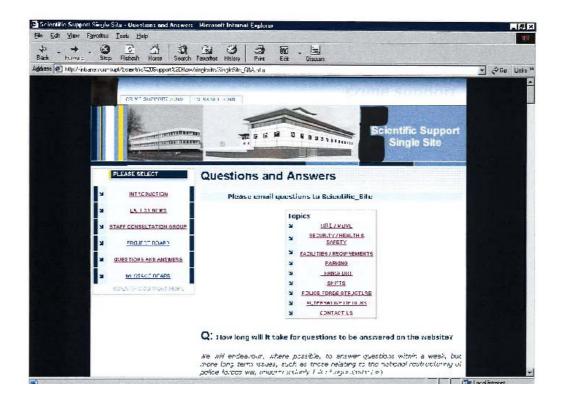
The new site was seen by the senior management as an opportunity to review processes and develop joint ones where necessary. In order to do this a series of development meetings were held during May and June 2005. These were initially held to develop interdepartmental relationships and also to help us develop a 'vision' of

what the department senior management saw the single site to be. In these initial stages, these meetings were held with just the departmental managers present, but even at this early stage it was identified that the same process would be needed for all the staff to meet and learn about all the other departments.

The staff consultation meetings had raised a number of issues that the staff were concerned about and it was decided that trying to disseminate the vision at this stage would be counter productive until the main issues were resolved and the staff were more relaxed with the concept of moving to the new site. A strategy was developed with a view to reducing apprehension throughout the project. The aim was to inform staff and increase positivity within the department about the new site.

### Strategy to reduce apprehension and boost morale:

 Provide a regularly updated website to give staff the latest information, diary dates and answers to frequently asked questions.



- Arrange a staff consultation group meeting monthly to discuss progress and raise any issues. Minutes were produced after every meeting and circulated to the group members. These were to be passed to members of their departments.
- A copy of these staff consultation meeting minutes were placed on the website,
   once it was developed, for all Scientific Support staff to access as well as regular
   photographs of the site as it developed.
- Arrange a presentation by the 'Safer Travel' policing team to discuss safety on the public transport system and projects being carried out to improve safety.

### Departmental Objectives in respect of the overall project therefore became:

To encourage the retention of specialist staff, including the provision of an allowance paying the difference in mileage between their old and new "home to duty" mileage,

payable for four years. This was despite the fact that all staff contracts stated that staff could be asked to work from anywhere within the Region.

Public transport was available and the local travel company would help plan anyone's route, including bus, train or tram travel. Travel was being made safer via the 'Safer Travel' policing team. They were willing to provide a talk about the routes around the area and improved safety measures. In response, they also asked that the staff acted as an extra pair of eyes and ears for them on the buses and report any unruly or suspicious behaviour on public transport.

Secure parking was available for all staff in the car park of the new site on a first come, first served basis, although there was no official requirement to provide parking facilities for staff (none were currently provided at headquarters).

At this stage, many of the staff were more concerned about how the move affected them and whether they could park. It was some way into the process and staff consultations before their focus became more about issues like how the departments would work and where their desks would be.

The first of a number of question and answer sessions was held for every department so that the most pressing staff concerns could be addressed. This produced a long list of questions and issues (shown in Appendix3) A suggestion was made that a website should be produced to provide staff with as much up to date information as possible as the project progressed. This was agreed agreement by the senior management. The

general mood after this session was still mixed, as the management were still not in a position to give definitive answers to all of the questions, such as whether there would be sufficient parking for everyone.

May 24th: Staff consultation day, two sessions with TGWU, personnel and Unison present After the main plans have been finalised, initial staff consultation is commenced in the form of meetings, which every member of staff is invited to. An overview of current project status is given and a question and answer session commenced. The Union and Personnel department are represented. The meeting results in a suggestion for a website to inform staff and a consultation group to feedback future questions and concerns.

The Scientific Support Manager's secondment was extended and expected to last until Boxing Day 2005 at the very least.

May  $25^{th}$ : Crime Support Senior managers meeting. As usual I needed to report on the progress of the project, but also the reaction of staff to consultation. I thought it was rather good, if somewhat cautious. They don't have a lot of information to go on, so they are understandably worried about the consequences of the move. Most are reserving judgement until they know more.

Part of the time spent this month with the department managers is taken to develop an overall plan for the departments to start working together and the new concept of one submissions desk for all departments within the building. The process charts were put to good use during this, plus reams of post its, which are useful for moving process parts about until you get the best combination! This will be an amalgamation of the various submissions desks already running in each individual department. It will give us the potential to develop a better, more effective submissions system that

is consistent across all department functions. It involves primarily three departments, but all the departments will be part of its developments so that we can have input from those experienced in a number of fields. The premise of the new site is also that we will all be familiar with the processes of the other departments. We will still be working as individual specialist departments within the building, but will be very much one unit and move forward with each other's knowledge and support...very exciting!

The workload is building up and it is difficult to manage both roles. I have continued strategic work to complete including work on national development of fingerprint techniques. This is a double-edged sword, as it allows me to have frequent discussions and advice from the Home Office Scientific Development Branch on the best design and layout for our new laboratory, but adds significantly to my travel and workload.

The Scientific Support Manager's secondment has been extended, but I feel less concerned about that than at the beginning. Although there is a distinct lack of support currently in some areas, as another Crime Support department is relocating this year, I am confident that once that is complete, I will get the full support I need to bring together all the strands of the department to complete the project successfully. Of course I am ever the optimistic and plan to stamp my feet a lot if this support is not forthcoming when needed.

### June 2005

June 3rd Bureau further consultation on plans two further consultation meetings

June 6th: Lab consultation on plans

June 7th: Laser demo

June 9th: Facilitator – away day planning

June 13th Submissions meeting – informing staff and consultation on workings.

On June 15<sup>th</sup> the second 'away day' was held and the Vision written. A discussion took place as to what the staff would ideally like the site to be, their 'vision' to work towards. This included what it would 'feel' like to work there or to use the facilities.

What would our stakeholders expect to see or hear? What service would they expect or need to be provided?

They were in agreement that this would be a 'Centre of Excellence' they would be proud to be part of, and that the unit would gain the respect of any visitors as a professional and competent place to discuss and submit forensic evidence. The main public point of contact was the submissions or reception desk, and management would want the staff to be helpful, friendly and knowledgeable in the examination of forensic evidence.

The vision was therefore determined as:

'The amalgamation of internal forensic providers will ensure that Studyforce will receive the best advice from specialist forensic fields, achieving outstanding results by providing a mix of knowledge, professionalism, innovation and continuity. With this vision comes the confidence that we can be the best at what we do.

In the planning process we aim to develop and provide clear and realistic plans, successfully communicate them to the organisation and ensure that both managers and staff are strategically aligned to them. All staff will be asked to challenge their current attitudes and assumptions, support the need for change

and realise what it will take to create success for the site as well as for themselves.'

Minutes from the Scientific Support Away Day 2006, p3

June 15th: Away Day! Boy was today hard work! Everybody commented about the site, as this was our opportunity to say what we thought it ought to be like etc. The mood was positive and cooperative, but sometimes it's really hard work to get some people involved and it was important to get input from all. Still, done now and lots of information to take away. We had also planned to discuss in detail how the new submissions desk will work, but we were a bit too optimistic and ran out of time. I'm a little frustrated at this as I feel this will be a pivotal issue later in the process as it involves so many departments and evidence types, but is key to the success of the new process. The plan was to literally walk through the process and I had provided props for this purpose. Despatch delivery arrives, what would we expect to be in it? Who books it in and so forth? I think this would have been a really useful exercise and may not be as useful without a facilitator to guide it.

The author continued her laboratory visits and added the benefits of previous lessons learnt to the designs. June 30<sup>th</sup> was the most important date to the project so far this year. The Police Authority would make its final decision now that more accurate financial details were known for the project. Fortunately it was approved and the team could continue to develop the full plans. During this time, the department also looked at integrating the existing processes, but with a modern twist, e.g. images of fingerprints pass from the laboratory to the Fingerprint Bureau and are scanned onto their computer system, or electronically transferred. They could not currently be sent as electronic images because the line from the laboratory could not support this transferral of data. Once the two departments were co-located this would be possible

and new protocols and procedures would need to be developed, documented and tested prior to use.

June 14th: Had to attend a national lab meeting today and took advantage of being near another newish lab; two years old but a more modern design than most. Very nice, but only three people work in it, so beautifully laid out, but not practical for the larger lab. Got some good tips though on whats gone wrong with the move and what didn't work. Well worth the visit.

Nominations were requested, one from each department, to work on the monthly staff consultation group. This was to be one forum through which the staff could raise additional questions or issues. Further to this, questions could be raised via email on the website, once set up, and through one-to-ones with the Personnel Manager if personal issues or circumstances needed to be discussed.

June 22<sup>nd</sup>: Visited a private forensic supplier today. Very useful to compare the style and scale of labs, but my main aim was to look at their dummy crime scenes set up for training! We plan to have one to improve our in house training facilities if we can, so very informative and fun.

June 23<sup>rd</sup>: An article appears in the local Evening Mail reference the main bus route that runs past the new site. It will hopefully help to allay fears about travelling on the route. This shows the councils commitment to making the main route safer and more user friendly, so it's welcome news.

"A five-year plan to transform (withheld) biggest bus route is finally set to finish....The showcase route, which carries 50,000 passengers each day has been undergoing a £25

million transformation. By the time the project is completed next year, £7 million-worth of new buses, together with shelters, real-time satellite information and road improvements, will be fully operational."

Regional Evening Mail, p17, June 23rd 2005

June 29th: I briefed my stand in for while I'm relaxing after the wedding today so that she has time to get properly involved. Not too much needing to be done, most things just need pushing to carry on while I'm away.

June  $30^{th}$ : Police Authority Meeting. I don't have to attend, but this is very important to the progress of the project, so very nervous evening! It feels like I'm the only one feeling nervous, but I'm sure that's not true! I know our project team are all enthusiastic like me and keen to get things moving forward.

Approval sought from the Police Authority for lowest building tender to be used and construction to commence in September 2005. Approval was given with instruction to reduce costs further where possible. These reductions had already been discussed and will comprise of material and decoration changes and not fundamental changes to department facilities.

Staff consultation meetings continue throughout June and the various questions and answers are collected. The intention is to develop a website that will have regular updates on the process, pictures of progress once construction starts and will be a point of useful information in relation to the move e.g. bus routes

At a higher level, the project board meetings also occur on a monthly basis and we have to report on people, finance and construction issues, amongst others.

In between consultations I am frequently looking at demonstrations of new equipment and technology, for example digital capture and transmission methods. I have also been touring recently opened laboratories for advice and inspiration. This has been an eye opener and extremely useful. Every body seems to do things so differently, despite the fact that the base concepts are the same! I am also keen to look at another few submission processes to help shape our unique process. Further 'away days' and meetings are held specifically for the submission process, but progress is slow and even more frustrating. Am I the only one to see how key this is? No one wants to make a decision or to even agree on anything!

Nominations were requested for the staff consultation group. A representative was selected from each department to give all staff a point of contact in the process. I feel this is an important part of the process, but I am looking forward to it with some trepidation, as it will no doubt be a painful process in some parts, as not all staff are happy at moving. These monthly meetings however, will allow a more personal approach to questions and issues. This has come about primarily from my soft systems analysis because I realised there were so many different issues depending on each persons personal circumstances and which location they currently worked at. Getting together at least a representative group on a regular basis seemed the most logical way to deal with this. Alternatively people could pose their questions via email, if they preferred (once the website is set up). As usual at the moment, the idea is met with cynicism, but a good selection of volunteers with mixed views of the move is received, so I'm comfortable that they will genuinely want to cover the issues raised by their colleagues.

July 2005

In early July 2005, the department received official notification that the local government authority had given its final permission for budget approval. They were funding the project in its entirety and the department did not therefore need to rely on any additional funding from the Government, which could slow down or ultimately cause projects to fail due to political changes or influences.

During the month, a number of fingerprint staff travelled to South Wales to see their new forensic building and discuss lessons learnt as their building was six months old.

The trip was very useful and some further specialist equipment was ordered for the new site as a result.

One of the concerns highlighted at the staff consultation meeting was the perception that there would be insufficient parking at the new site. To investigate further whether this point was accurate, or indeed a misconception, an initial fact finding spreadsheet was sent out to each department. The staff were requested to record whether they intended to travel to the site by vehicle and therefore would require parking of some form at the site, or were intending to travel to the site by public transport or other means (for example lifts from partners). The results would be collected throughout July and assessed in August.

The project meeting was cancelled due to the aftermath of the London tube bombings.

Some members of the senior management team were involved in various aspects of dealing with the situation. In incidents such as this, there are national call centres and

information lines that are instigated to share the workload across a number of forces and provide urgent assistance to the lead force.

Existing staff were identified as those who would form the backbone of the new submissions desk. They were brought together to discuss the desk, which was at a very early stage in design still. There was a subdued reaction as they were understandably wary of a complete change in their role and I attempted to reassure them that the new role would be an amalgamation and slight variation on what they were all doing currently. Of course this just made some of them disappointed too!

On July 1<sup>st</sup> a fact finding spreadsheet was sent out to all departments requesting transport and parking details for members of staff and visitors, including shifts. This asked members of staff to express if they would be travelling by public transport, car, motorbike or bicycle in order to determine whether there were suitable numbers of parking spaces on site. The number of parking spaces could not be increased as it was restricted as a planning condition for the building.

July 1st: Now a number of staff have convinced themselves that parking will be an issue and are refusing to park on the street. This is despite the fact that we don't even know if there is too little parking (some are surmising having never been to the site), but secondly it puts me in a delicate situation, as the force does not have to provide parking for staff at it's sites anyway and it certainly doesn't at most other stations, so a president has already been set. My, isn't the rumour mill wonderful!

# Scientific Support Single Site Transport Fact Finding Survey

	Number of Staff at new site	Number of spaces requested	Comments	Number using public transport	Number using Motorbikes	Number using Pushbikes
Fingerprint Bureau	56	42		16	4	1
DNA Bureau	9	7	Two of the 9 staff are job share and will not be in the building at the same time.	3	0	0
Photographic/CCTV	17	15		1	0	0
Fingerprint Enhancement Unit	22	17	Some of the 22 staff are job share and will not be in the building at the same time.	0	1	0
SSIU/Central Submissions	10	6		5	0	0
Soco Training/Scientific Support Management Team	4	4		0	0	0
Total number of spaces currently available on plan		76 (potentially 90 available for general use)	Two spaces are marked disabled spaces, there are a further 8 currently set aside for the training block and space for another 8 unmarked spaces within the yard.			
Total car park spaces requested:		93	This includes 8 vacancies as requiring car park spaces, and two visitor parking spaces. Does not take into account annual leave/rest days and sickness.			
Total Staff (including vacancies)	118					

July  $8^{th}$ : Our project board meeting is cancelled in the aftermath of the London tube bombings; it puts it all into perspective. Consequently security issues become another priority and concern (and worry point for the staff).

July 11th: Further consultation with submissions staff. Comments taken forward to the managers meeting on 13th July. Existing staff are identified as those who will form the backbone of the new submissions desk. They are brought together to discuss the desk, which is at a very early stage in design still. There is a subdued reaction as they are understandably wary of a complete change in their role and I try to reassure them that the new role will be an amalgamation and slight variation on what they all do currently. Of course this just makes some of them disappointed too! Some are excited by the prospect of a new style of job, but others seem more preoccupied by whether this will mean redundancies. It's been made clear all along that this is not the case as we are currently under staffed, but they don't want to believe me. Frustrating.

July 12<sup>th</sup> visit to force to look at new Scientific Support building which had been open approximately six months and was built using a similar budget to the project. A brand new site is open in Wales and again a team of us visit to look at specific areas and discuss the various problems they encountered in the process of developing this site. It is massive and very new. We are all impressed by the quality of the facility and all reaffirm our intention to ensure that ours is a facility to be proud of.

July 13<sup>th</sup>: Away Day Team, second meeting submissions discussed and report issued to the SSM showing three options. All will work, but the choice needs to be based on how the SSM sees this aspect of the department panning out. I will have to securely email the document to Thailand!

July  $19^{th}$ : Last day before my wedding and honeymoon. So tired and mixed feelings. Excited and nervous about the wedding, but worried about the timing and what will happen while I'm away!

We got approval! All systems are go, thank goodness. There is a proviso that costs are reduced where possible, but the fundamental concept has been approved, so this will mainly consist of changes to finishes and decoration. I am so relieved! This means that tendering for the building work can commence, this is an extremely positive sign. Most of the department is still on tenterhook; will it go ahead or not? The answer is yes! After the return of the tenders, the authority also gives their approval to the final costings.

The existing site is slowly being emptied in the background during this process so that building can commence to schedule. What a nightmare! It's amazing how much junk is stored in a building and how everyone suddenly disowns it when it needs moving! It's very important that everything is cleared as the site will be handed over to the construction team and completely gutted. Literally

everything will be stripped, as the existing building is having new internal walls, ceiling electrics and everything, so the first process is a complete strip down.

This month we also lost our personnel manager and a new one is not expected for some time, so I have to continue with the consultation process alone! This doesn't help with staff suspicions! She has obviously moved to avoid awkward questions and the department are deliberately not recruiting a replacement!

July 22<sup>nd</sup>: The big day arrives for me and I get married. I am completely exhausted and have nearly a month off for our wedding and, honeymoon. I need it!

# August 2005

August was quiet due to many people on their summer breaks, but development of the procedures and new systems continued. The author was seconded to the project full time due to the escalating workload associated with the project. The Scientific Support Manager was still currently on secondment to Thailand and was not expected to return until some point, as yet unknown, in 2006.

The department had now recruited a new Personnel Manager and data for the website was submitted for approval to the Personnel Department to ensure that the questions were answered in accordance with force policy. The new manager agreed to hold one to one consultations for those staff that had difficult queries or those who may have wished to relocate rather than move to the new site. This issue had occurred for two members of staff who were close to retirement and therefore wished to continue working in the city centre rather than go through the upheaval of the move to the new

site, only to retire three or four months later. The Personnel Manager was looking for short term attachments for them to cover this period.

The post of Personnel Manager had been vacant for approximately two months and therefore some members of staff were extremely concerned about their futures. The one to ones were carried out with the aim of allaying those fears.

August 22<sup>nd</sup>: Back to work! I think I need another holiday now I've seen how much I need to catch up on! Shortly after my return from honeymoon, I am suffering the consequences of trying to manage two separate areas and I am seconded to the role of project manager full time and a replacement manager is found to cover my other management role. This is at my instigation to preserve the continuity of the project, the effective running of my own department and my sanity as an individual! This was originally planned to be for about three months until the Scientific Support Manager's return, but was extended to cover his further extended secondment. There is ambiguity over when he will return, the date keeps moving and is, as yet, still unconfirmed. As the date is currently projected to be April 2006 after annual holidays are taken, I have taken a firm stand as the project needs to continue to develop and cannot wait for his return to progress.

The train rolls onwards..... I start looking at suitable racking suppliers for the large amount of records that need to be stored. They need to be stored properly now too, but there is limited room and so they are stacked along walls to keep them out of the way.

The questions asked at the various consultation meetings are answered and then submitted to the personnel department for checking prior to putting on the website when it's ready. We have a temporary Personnel manager for the first time for a couple of months, but this just opens up the

floodgate for consultations on individual members of staffs futures. In the end, four staff receive permission to stay at the head quarters. Two due to impending retirement and two for family reasons/transport feasibility reasons. This is possible due to force policy. The force is family friendly and therefore if their requirement for staff to move location is not feasible due to family commitments, arrangements are made for alternative location where ever possible. It was decided that the level of upheaval that would be introduced was unsatisfactory for the two members of staff who had only a short period of their career remaining. They had both confirmed in writing their intent to retire and therefore at their request new roles were found for them in the remaining departments that were similar to the existing ones until retirement was due.

## September 2005

At the beginning of September, the pre-contract meeting was held on site with the selected construction company, ready for commencement of the work in October. The company's site cabins were installed so that utilities could be installed prior to their occupation. Many visits were made to the site to ensure that, not only have all the residents moved out as scheduled, but that anything that remained is to be scrapped, as the constructors would be gutting the building as their first act on site.

The electrical loadings were reviewed as there were significant amounts of data points and plugs. Much of the equipment was either computerised or the results were recorded via computer systems and therefore some areas of the building may have required additional airflow to reduce the heat levels in those departments.

The acting Scientific Support Manager was promoted and moved to another department. A new temporary Scientific Support Manager was put in place. They were

an experienced policeman, but had not previously been involved in depth with this department or forensic science.

The author continued her visits to existing facilities by visiting the main exhibit stores.

This was to look at evidence storage and documentation to see if the existing computer recording method could be integrated at the new site.

September 1st: Meeting with the alarm engineers to discuss potential system for the new site. They have selected a potential system, which I had to get my brain around today. It will need programming by us as staff change, so I needed to make my notes clear. Not sure they are looking at them now!

September 2<sup>nd</sup>: M L E meeting with engineer to discuss lab options. We have been discussing options for the lab and today was great because the engineers were describing what they can achieve and how it will work. Specialist magnetic drafting boards, individual extraction etc. It looks like it will be great so I'm really pleased!

September 7th: Pre contract meeting with constructors. This is an important moment. It is the first time we have met them as a department and this takes place on site. I think it really is happening, but already there appears to be slow progress. Start date is confirmed as 24th October (delayed from September) with completion just before Christmas the following year on 20th December 2006. I continue to look at new techniques and processes with a heightened sense of reality now that the builders are here ready and waiting to get started. Their construction cabins have been installed on the new site. A useful hint to those still in residence in the main building that they need to be gone soon! They have been reluctant to move as they have plenty of room and parking now that the site is

almost completely empty and they will be moving into smaller premises while our construction work is carried out. None of these staff will be moving back into the building once the work is completed, so they see no advantage to vacating it now! Some of them seem to think it won't harm if they stay on a bit, especially as there are loads of parking spaces and the building is lovely and quiet! They may they may change their mind when the bulldozers arrive!

During this time I have to update our insurance inventory. Normally this has been an ongoing process of adding any new equipment and deleting the occasional item that had been scrapped. This year, however, over the last few months it has been very time consuming due to the major clear out! It will need reviewing again as the new equipment arrives, ready for installation at the new site.

### October 2005

Construction work commenced on site on 24<sup>th</sup> October 2005. Before this occurred, a final security sweep was carried out by the author and Property Services. The existing building was completely stripped out, including wiring, ceiling, windows and even some walls. A large hole was dug out to start construction of the foundations for the extension.

Detailed discussions were held between the author and the Property Service's Project Manager as to which budgets items of furniture and equipment would be purchased from. This was necessary as requests for capital funds were due and submitted at the end of October. In addition to this, funding was sought for the required level of security needed. This came from a central budget and the existing site had not required security, therefore a business case needed to be produced to justify the increase in spending. Computer equipment is funded from Crime Support; therefore a

report was submitted to request the relevant number of terminals. Printing would be carried out using group printers that double up as photocopiers. These had to be submitted via a further report, as they also form part of a separate force wide contract, as do water coolers.

The smaller consultation group had its first meeting and its terms of reference were discussed. These were to act as a point of contact for each department. Each member of the group would disseminate information from the meeting to all members of their department and likewise broach any questions raised by their departments to the project team via the consultation group. The members were wary, but keen to resolve any issues raised by their colleagues. The group included an invitation to both union representatives within the force, the Personnel Manager and the Finance Manager, so that all potential queries could be answered.

"Terms Of Reference

There are a number of project groups running in order to develop the site to it's maximum potential. These include:

1) Project Board – This includes the project manager, the Crime Support Personnel manager and Business manager, the property services manager, representatives from IT and Scientific Support and the Head of Crime Support. ACC Hyde chairs this group. 2) Project Team – This includes all the Scientific Support departmental managers.

Sarah James suggested that if members of the consultation group felt that the meeting would benefit from having a union/personnel representative present for clarification on specific topics, they should speak to Sarah before the next meeting, in order for them to be invited. After consultation, an open invitation was sent via email to Unison, T&G Workers representatives and the Crime Support HR Manager.

The frequency of meetings was discussed and it was decided that the meetings should initially take place once a month. This is to ensure the regular flow of information to staff is retained.

Action: Sarah James to book a room for the next meeting.

Sarah James explained that the meetings should be a two-way process. Information will be disseminated to staff and they will cascade the information to colleagues. In turn, the members of the consultation group will bring questions from colleagues to the meeting to establish answers.

[Name] asked who the dedicated Scientific Support Personnel Officer is. Sarah James told the group that it is [name], although, [name] is the Strategic Personnel Manager and therefore would be more involved in the issues concerned with the Scientific Support Single Site.

Sarah James told the group that the consultation meetings will be minuted by [name] and these will be published on the Scientific Support Single Site website to demonstrate to staff that their questions are being asked and answered as fully as possible, either in the minutes or on the "questions and answers" page on the website, once an answer has been established.

Sarah James reminded the group that the project is still at a very early stage and that some answers to questions will not be available until later on in the project.

The consultation should be productive, with a full and frank discussion on the concerns and questions from all Scientific Support staff."

"Secure Parking

What has changed in the plan to enable sufficient parking for everyone?

Sarah James said that she sought clarification about exactly how much parking there was at [site name]. With the work done on the travel survey, and the parking spaces available re-evaluated, it was found that there would be sufficient parking for everybody, including additional spaces. (Therefore, the parking space available was underestimated initially)

Sarah James explained that (Strategic Personnel Officer) is also looking at shift patterns to accommodate travel requirements, and the public transport available."

### "Level of Feedback

The consultation group criticised the amount of feedback that staff are receiving.

Many of the staff in Scientific Support had not heard that the proposed move was definitely taking place. Many were then surprised to hear that building work had commenced. Sarah James said that department managers were told about the progress and when work was due to commence. This information should have been passed down to staff. Now that the website has been developed and is online, staff should be kept up to date with progress in the project."

Excerpts from the minutes of the Scientific Support Staff consultation meeting 31<sup>st</sup>

October 2005

During this initial consultation meeting, the project website was reviewed for comment prior to launch. The website consisted of all the questions raised in the larger meetings, complete with answers where possible. Some of the answers required policy decisions, which were not forthcoming at that stage of the project, but all appeared with the latest update. The names of the group members were also included, the consultation group minutes and the date of the next meeting, plus the latest construction photographs (which were taken at the monthly site meetings) and details of who to contact and how regarding any further questions. Additional

questions and answers would be added if they were relevant to everyone. Private questions were dealt with as such. It was met with very positive feedback from the staff attending the consultation meeting and was immediately released for general view. The website was only accessible by internal police staff and officers, as it was on a secure link, for security reasons.

Some of the initial queries were about public transport to the site, parking availability and when they would be able to visit the site to view their new facilities.

October 25<sup>th</sup>: Capital bids submitted for equipment needed at the end of 2006! Some had been submitted the previous year too, I want to make sure that the finance department are fully aware of our needs at the new site, especially if we want to drastically improve things! There are so many reports to do. I don't see why they can't let us put them into one report or spreadsheet and then allocate them to the different budgets if approved, but that would make life simple wouldn't it!

October 3<sup>rd</sup>: Single Site Project Board Meeting. I've noticed that everyone's getting more interested now that the site is nearly empty and work will begin. I thought this would be a good thing, but it just means more questions and actions for me!

October  $13^{th}$ : Furniture meeting, final numbers for what will be new or recycled and where they will go. Talked more in detail about computer numbers today; Most of us have a computer as we need to update our forensic tracking system, so these will be moved.

October 17th: The last department moves out of the existing police station, reluctantly, hurrah! I thought we were going to have to prise him out, he really didn't want to go now that he has the place to himself!

October 19th: Final sweep of equipment from existing site. Had to ring around a number of departments and warn them that it would be skipped on 24th otherwise! I was surprised at how many had just left full cupboards under the stairs, where they'd secreted them years ago. The builders will be gutting the place, so I have personally made sure that all paperwork etc. is collected and I know [name of Property Services Project Manager] has done the same!

October 24<sup>th</sup>: Single Site Managers meeting to further discuss the layouts. I tried to answer any queries about the designs and stress the importance of getting the numbers of sockets data etc. right in these early stages. And finally! Work commences on site, yippee! This is it!

October 26th: Crime Support Managers Meeting. Still no interested yet!

October 28<sup>th</sup>: Meeting reference the internal application for 24 hour site security reference funding.

Levels of service discussed ready for business case submission. Another area of frustration is funding for security. This also comes from another budget and I am trying to impress the fact that this additional funding will be needed in 2006 to secure the site for occupation, but as it is not their project or new building, enthusiasm is sadly lacking. Another uphill battle to be fought.

October 31st: Inaugural Staff Consultation Group meeting. Nervous today, but it went fine. I wasn't sure if they would take the opportunity to gang up on me, but I think they appreciate the opportunity to ask questions and get updates regularly. No unexpected questions, but I'm totally

shocked still at this insistence about parking spaces. Now they think I'm involved in some kind of conspiracy! I have obviously lied about the number of spaces as it was raised as being a problem early on. It's amazing how these things get out of hand. From memory, I think that the site was tight for space when it was an active station and the planners wouldn't let us increase parking, so the team and staff had initial concerns about there being enough, but this has not turned out to be the case. It will be tight, no doubt, but I think with shifts/leave etc. it will be manageable, but this has turned into a major conspiracy theory amongst the staff. Give me strength! Haven't I got enough real issues to deal with!

The website requested at the first open consultation meeting has now been launched at an inaugural staff consultation group meeting. It contains all the questions and answers raised at the larger staff meetings and up to date pictures and reports of progress. This smaller consultation group is made up from volunteers from each department who will act as a two way feed to their colleagues. They are invited to give feedback about the website and it is very positive. A lot of effort has been made to include any information that might be needed, but the site has been developed to be interesting and updated as regularly as possible. This is to be done at least once a month with new pictures of progress on the building site.

The opening meeting was useful for gauging general reaction to the move. The members were understandably wary of the process. It is important that the meetings form a two way process and the organisation can be clearly seen to be answering questions and resolving issues to reassure the staff through the 'discarding' phase of the change process, accepting that the change is becoming a reality and discarding old

opinions and techniques and enquiring about the new ones. This fundamentally includes the basic routine and structure of a person's working life, working hours, transport issues, facilities and other elements. The website and consultation group are set up to assist in this process.

Unfortunately our process did not fully take into account the bureaucracy of senior management decision making in what was an unusually large move and therefore warranted policy decisions and corporate responses to a number of issues. These decisions were slow and often contradicted repeatedly and therefore completely undermined this process at stages of the project, particularly towards the move itself as members of staff required accurate answers to be able to plan their own modes of transport and work hours. The Personnel Manager and union representatives were invited to these consultation meetings to offer a more balanced view. The union approach, unfortunately often clouded the issues, again by contradicting the responses made by the departments senior management. The minutes of the meetings were also published on the website for the reference of all staff.

The staff wanted to visit the site at a very early stage, which was not possible due to the building work on the foundations. It was explained that at this stage the building bore no resemblance to the building that they would be occupying, but they took this to be another conspiracy to hide information from them.

In the early stages, when the staff were apprehensive about parking facilities, they were keen to have official confirmation of the number of parking spaces, plus the

number expected to be needed. The existing station had limited personal parking facilities due to the large number of staff present, plus additional operational police vehicles based at the site. It was explained that despite the building being doubled in size, there would, in fact be less staff on site than previously. In the early stages the number of parking spaces available changed due to design modifications and planning restrictions, but would still be an increase on the original parking available prior to the construction work. A survey was carried of potential parking needed, but many staff chose to avoid committing themselves to a particular mode of transport and therefore the comparison was carried out on the assumption that most people would require parking. In fact some staff had stated that they would refuse to move to the site if a parking space wasn't guaranteed, although there is no requirement for the organisation to provide parking, indeed at busy stations, police officers are forbidden from parking within the station car park. The out come was close and some staff chose to believe that the design team or senior management had reduced the size of the car parking spaces to ensure there were enough! Despite repeated assurances from me that there were officially laid out guidelines for the size of parking spaces and physical proof by measuring existing car park spaces at headquarters, that measured the same as the planned spaces, parking remained an issue through out the process.

The building work has commenced on the site, already one month delayed by contractual fine-tuning. It is really happening and a buzz of excitement has begun. A final security sweep is made before the building is handed over to the constructors and the strip down begins. Within a week, I cannot recognise the place as it looks like a derelict building with all the windows taken out and floors, ceilings and walls stripped

out. It is hard to visualise the final building, but staff are already asking when they can visit the site.

Our acting Scientific Support Manager is posted to another department during October 2005 and we have a new face and a change of emphasis. He is less involved in the detailed decision making, although always keeping in touch and is there to make final decisions if necessary. This may be due to the impending return of the Scientific Support Manager in April of next year, but just increases my uncertainty in the level of progress being achieved, particularly as this return date is still unconfirmed and is stretching nearer and nearer to the end date of the project. Maintaining the momentum of the project within the department is down to me. Building work will progress through its sixty-week build plan regardless of whether we are ready as a department to make our new systems work. I feel sometimes that I am the only one who sees this? I am frustrated that this message does not appear to be reaching the managers. The attitude is that it will 'all click into place', but I know from experience that this doesn't happen unless someone is planning it in the background, unless you are extremely lucky, of course, and none of us have won the lottery yet, so I rest my case! At the commencement of planning we were going to be sharing our accommodation with another emergency service to improve our liaison with them and provide closer links. We had heard no more from them since our initial meeting twelve months ago so I contacted them to see if the plan was still viable for them. It seems the problems are the same in most public sector organisations. They too have had a complete change of management, so much so, that none of the original attendees at the meeting were around to continue the process, but the new staff have arranged to meet and the final piece of our puzzle is falling into place.

Various meetings are being held to look at capital bids that need to be submitted already, for new expensive equipment needed at the new site. These items are not covered by the project bid, except fitted items like fume cabinets. These are bids for the 2005/2006 and 2006/2007 financial years. As

the site will be taking on large amounts of new technology, we have to plan how many computers we will need too, otherwise we will not get them when we move in, we would have to wait for the next financial year. Trying to impress this on the department managers is slow and frustrating.

### November 2005

In November 2005, National Police reform was announced and the local Region consisting of Studyforce plus three further forces were expected to merge. This was not a popular decision, both locally, and nationally as many forces were faced with merging. Scientific Support within Studyforce were fairly positive about a potential merger, as when initially viewed, they were in the strongest position to dominate the service provided, with by far the largest department and the new purpose built facility on the way.

The smallest force's Senior Management were also positive, as they had limited facilities and no funding to develop these. They saw Studyforce's new site as a way of improving their service to the force, without the significant investment that would be required of their own facilities.

The two further forces were against the merger. They both had well equipped and established services and saw Studyforce's new facilities as a threat to maintaining these.

The author was ordered to immediately carry out a review of the new sites potential to supply a regional service and submit a report to the Assistant Chief Constable (Crime). The executive summary of this report stressed that while some departments could successfully cater for the whole region, others could not adequately cope with the additional workload. There was additional accommodation on site in the form of an existing three-storey training and accommodation block, which had been emptied to allow complete occupation of the site by the construction company. Redevelopment of this would also allow room for a central management suite for the region. It was suggested in the report that additional specialist facilities would also still need to be kept open across the region to allow for outsourced forensic expertise to be returned to in-house facilities.

In reality, when the forces met, it was decided that all three large laboratories would be needed and the most logical way forward would be for each to specialise in a service and provide it for the whole region. This way all of the regions services could be developed and expanded to offer services that they could not currently accommodate e.g. firearms examination and make further savings on their bills for external services.

The announcement created nervousness within the department, as other capital projects were put on hold pending the outcome of the process. It was believed by the members of staff that this project too would be affected, but due to the scale and future potential of the site, the project was allowed to continue. During this time, funding for the security requests was successfully obtained.

Famous last words... National Police reform is announced and the local Region consisting of Studyforce and three other forces, announce their preferred options for police force restructure. All have staying the same as one option and all merging as a second. The third option varies, Studyforce suggest a merger with their smallest local force. Other local forces suggest alternative collaborations. There is interesting feedback from the local forces about the potential mergers. There is resistance to what is seen as a Studyforce take over bid, except from one local force, who as one of the smallest forces in England appreciates it will not survive this process without a merger with at least one other local force. A further local force is announced as the best performing force in the country and therefore demands a reason as to why they should merge. They later decide to refuse any merger option and want to have an enhanced force of their own. A debate also starts in parliament as the police authorities rebel against the decision; they have not been told where the finance for change is coming from. This is all very unsettling for the project and I am asked to report on the effect any potential organisational changes would have on the ability of our new site to provide the service. Our new site will be one of the biggest in the country, even so, some of the organisation sizes they are suggesting would still be too much capacity for it to cope with, even if that was the best way to provide a regional service and that also will be open for debate. I have submitted a full review to the Assistant Chief Constable (Crime) for discussion at senior management level.

The new Personnel Manager was now in place and the author formally handed over the major issues and briefed her on individual cases that had arisen. An initial discussion about the 'people plan' for the migration to the new site was also held.

November 1<sup>st</sup>: The website address is released to all Scientific Support staff for information and continuous communication of progress. This is a secure website which

is only accessible from our internal system to avoid any chance of access by outside parties and a risk to the security of the new site.

November 2<sup>nd</sup>: At last! A meeting with the new Strategic Personnel Manager about staff one to ones as some have real concerns over child care issues, travel times etc. I handed over the results of the transport survey and expected shift patterns for each department to assist in the process, but it's going to take time for her to assess the situation politically. We had an initial discussion about the 'people plan' for the new site to review training needs etc. I felt more positive, but you always worry about what you really end up with in the end. I feel a huge responsibility to everyone to get this right. We will all have to live with the result for a very long time!

November 9th: Crime Support Senior Managers meeting. Scarier than usual, because they are suddenly interested in the new site and its ability to deliver a regional service! It's the only thing on people's minds at the moment. Will it bring redundancies?

November 10<sup>th</sup>: Security business case approved by Assistant Chief Constable (Crime).

Regional scoping document also issued to ACC (Crime)

November 15th: Design team meeting on site! It seems very real now that the building is going on around you! We had a quick look round before the meeting and I took some photos for the website and our historical record. Lots happening and I don't recognise the building as it's been stripped bare! The old extension has disappeared and a big hole for the new one has started. I'm so glad I recorded it as I don't think people will believe me!

November 17<sup>th</sup>: Meeting with specialists' reference the fingerprint system and socket/data requirements.

The security funding requests are finally approved, which is some relief and will hopefully bring some reassurance to the staff, as they are still wary of the new location despite there never being major problems with any of the existing police buildings that have been on the site.

#### December 2005

Whilst awaiting any confirmation of the force merger plans, the project team and managers continued to work developing the project. The 'people plan' was discussed further to review if there will be vacancies in addition to the movement of internal department staff. This also provisionally identified additional training that would be needed to fully equip the staff in their new roles. This was held deliberately early in the process; the new site would not be operational for in excess of another twelve months and therefore any issues arising from these discussions could be addressed. Sufficient time was also needed to ensure that relevant training packages could be developed as they would not be available commercially due to the innovative nature of the site.

A further development meeting was held with the staff to involve them fully in the process. The system needed to comply with legislation, but also be physically practical and as un-bureaucratic as possible to reduce wasted time and activities. This was one of the main problems with the existing system and locations.

In order to do this, a certain level of multi-skilling of staff would be necessary. Prior to the move, each department was responsible for a particular field or part of the evidential process and in some aspects, this would continue at the new facility e.g. the Fingerprint Bureau staff would still be responsible for identifying offenders from the fingerprints found at crime scenes or developed through the laboratory processes. But in the case of the administration function of the site, it would be necessary for staff who previously had knowledge of one department to become skilled in knowledge of all the departments on site. This was primarily due to the amalgamation of the function by bringing them together at the new site, but also because in order to provide the professional service identified in our vision, the front reception desk would also need to be an exhibit handling centre and point of initial enquiry and therefore the staff would need to be knowledgeable of the holistic service provided within the unit and the best course of action to take with each case. This submissions desk would be managed by the existing submissions manager and therefore an experienced decision maker would also be on hand.

Multi-skilling<sup>1</sup> is not a new concept, indeed it is common practice in many fields, but was new to this force in the arena of forensic science. Forensic Scientists would usually

\_

<sup>&</sup>lt;sup>1</sup> Lloyd (1996) discusses the advantages of multi-skilling to the organisation; in the case of Studyforce, flexibility of staff positions and reduced staffing costs by negating the need for additional staff to provide the new submission service. One clear advantage is a less bureaucratic approach to customer enquiries. With truly multi-skilled submissions Officers, no longer will customers (i.e. police officers) be passed from department to department to pick up the results of individual processes on a single case. They would now be dealt with by a submissions officer conversant with all aspects of the case, whilst not diluting the individual specialism within each department. The danger would always be a dilution of their existing skills in the process of multi-skilling.

specialise in one field in order to become an 'expert' in the eyes of the legal system and so it was predominately with Scientific Support staff. The forces expectation was that each specialist had a thorough knowledge of each others work in order to facilitate best practice across the whole facility. True multi-skilling was needed in the administration and process decision areas where staff were expected to thoroughly understand processes they would not have previously dealt with, in order to have informed decision making.

The whole project process could be put further into context, as within three months of moving into the new site we would be expected to have reformed into the new regional sized organisation. We had difficulties with moving staff four miles away but the region would be hundreds of miles across and potentially staff could be asked to move as some services may be centralised within organisations! Some of the staff from a local office took the decision to move the thirty or so miles from one headquarters to another and did not move house, so happily accepted the additional journey — motivation appears to play a huge part in our acceptance of change. These staff were motivated for their own purpose to move, but as 'the organisation' was the motivational force behind the move, the resentment and reluctance was greater in some staff.

\_

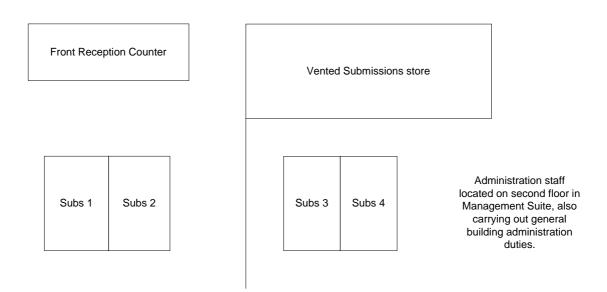
Lloyd also talks about the breaking down of social barriers and improving cooperation, which would benefit the new site and bring attitudes closer to the new vision. Unfortunately, this involves a cultural change and therefore the organisation may find barriers to the change by staff who can understandably feel insecure during this significant change period. It is to be remembered also, that in Studyforce, this cultural change comes in addition to the already significant change to the new location and layout and will need to be handled carefully and be considered fully.

The reform had badly affected the change management and acceptance of this project as a further move or potential job losses was preying on everyone's mind meaning that they had difficulty looking forward to the new site because it is viewed as potentially a temporary move for some staff. This was realised through the question and answer page on the website which was inundated with questions on the topic. Senior management tended to view the new site as an opportunity to take on more work, not remove it to other sites! As the project manager I was like a see-saw or balance in the middle, trying to weigh up the issues and the possibility of both!

December 7th: Crime Support Senior Managers Meeting. Interest is still mainly on the MIU and potential force restructure. Understandably really, as they have all been asked to report on the consequences of such a merger on their departments.

During December 2005, as no decisions are being made about the restructure in the short term future, work continued on developing the new processes. The managers' had a further meeting to develop the overall people plan for the new site to ensure that all new roles needed can be filled with existing staff and any relevant additional training given. Some existing roles will move from individual departments to a central administration section and submissions desk. Each is currently specialist in their own area. The 'new' staff will have a broader knowledge base so will be cross trained in each others' specialties. In this way, they will be specialists in the department and will be able to assist customers with all their exhibits and enquiries.

## "Option 1



Four submissions desk staff dealing with all submissions and initial enquiries to the building, these would be based in the submissions office/store. Two administration staff based on the second floor dealing with all building administration issues and offering admin support to the management team, including management of the meeting and major crime facilities.

## Advantages

- Single process, received and dealt with at reception desk.
- Good resilience for submissions role/desk.
- Knowledgeable staff to deal with initial technical enquiries.

# Disadvantages

 Additional duties for submissions staff. Booking in of exhibits currently carried out by administration officers in each department.

# Option 2

Front Reception Counter

Vented Submissions store

Third member of administration staff based in management suite on second floor to provide support to management team.

Admin 1 Admin 2 Subs 1 Subs 2 Subs 3 Subs 4

Two administration staff based at the reception desk, carrying out a receptionist role, dealing with visitors and any building administration tasks such as ordering consumables etc. Up to four submissions staff based in the submissions store dealing with the decision making on forensic submissions. One administration officer, giving administrative support to the management team, including management of the meeting and major crime facilities.

# Advantages

• Good resilience to both the reception desk and submissions function.

# Disadvantages

 Six staff in the reception/submissions store area when initially designed predominately for storage of exhibits. • The store section has no windows to maximise security of exhibits.

• This area also has no air exchange, although it does have ventilation through

ventilation fans and internal door vents.

• Double process, received by administration staff and passed onto submissions

staff for decision-making process."

"Actions resulting from the Meeting

Action 1

Sarah James to discuss preferred option with the Scientific Support Manager and John

Webber.

Post meeting Note: This was carried out on Thursday 9<sup>th</sup> February 2006 and the

decision was made to go with option 1.

Action 2

[Names withheld] to develop fine detail of submissions desk, working systems.

**Follow Up Action** 

[Names withheld] to develop Job specification for the Central Submissions role for

evaluation and grading."

Excerpts from the minutes of the Scientific Support Development meeting Friday 9<sup>th</sup>

December 2005

218

December 9th: Single Site Development Meeting reference the Administration and how it will be combined. We had a good discussion, but they don't seem to want to agree or be committed. They just seem to want to justify why they should keep the admin within their own departments and then have some additional posts for the new submissions desk even though we've been told that if we want to have new posts we need to lose them elsewhere!

December 12th: Single Site Staff Consultation Group.

Any staff concerns will need to be addressed once the plans are firmer. A further discussion session is held with the staff to develop an effective process. Reluctance still remains, but some of the uncertainty has been taken away by these sessions, as the staff are helping to shape the process and therefore have an insight into the role. They also know their own roles comprehensively, so they can bring lots of fruitful ideas to the table. There is some disagreement over the most efficient way to move forward and I draw up two options to discuss with our acting Scientific Support Manager. Either will work well, so it is just a matter of seeing which fits in better with the vision.

December 19th: Design Team meeting on site. Can't believe how much it changes every time I visit!

The new foundations are going in and a new extended front step at the entrance has gone in. This will form the reception and access ramp. Having seen and discussed all this on the drawings it's very exciting to see it appear! Obviously the builders and specialists think I'm mad, this is normal for them, but we've never been through this before, so it's magical! The shape of the new department is forming before our eyes...

Happy Christmas Scientific Support!

On his return in 2006 from his long project absence the Scientific Support Manager was interviewed about his expectations for the project and the reality that met him on his return. His vision has been discussed extensively within this thesis, but in addition to this he had hoped to achieve a number of additional innovations having had a period of time to give more consideration. He wanted to develop the best unit with the most knowledgeable and flexible staff by multi-skilling the staff to give comprehensive knowledge of forensic evidence. This was unusual in Scientific Support, where staff are usually specialists in individual disciplines. His desire was for the department to lead the way in improving services and making more efficient and cost effective use of forensic science and technology, therefore improving the links and benefits to operational policing, the organisation and the general public.

Returning to the beginning of the project, he described his initial feelings on hearing that the project could proceed, as jubilation. At last! It had been a long hard battle to get the approval for the site and he had very much been the champion of the cause in the early days. The concept had been proved in other forces, but was a huge financial commitment from the Police Authority in an atmosphere where national budgets were being cut. He described having good support from his own management with plenty of advice when needed from the senior officers steering group. This was about the fifth attempt for approval of the concept and each time the business case was growing stronger as advances were made in forensic science and the standard of some of the accommodation deteriorated.

Prior to commencement of the project, he felt that the biggest issues raised by the staff would be transport and parking. This had proved correct. His own biggest concern was that they had one chance to get it right and he was concerned about whether it was possible to get it right.

Having returned late in the process he appeared pleased with the resulting plans. He was "well chuffed".

"Q: What were your expectations of a new site and what did you hope to achieve there?

A: I wanted to end up with a centre of excellence that properly integrated the departments and got the best out of working together. I wanted operations to do business our way so that we had more control over exhibits, how they are submitted and the quality of them. A better understanding of operations and each department is needed for the interchange to reap benefits for us. I wanted one of the best units with room for growth so that we could bring more services in house and get better value for money. I'm not sure we achieved the right combination of staff, but we have a base now on which to improve that and I want to lead the way in respect of reform. I wanted staff to have more awareness of other departments and have more ownership. I still want this and with closer links to operations we can have 'buy in' from the start. We needed to streamline the business processes to do this and give us closer control over the budget.

Q: Did you feel there was sufficient support from the senior management in the early stages to make the project reality or was the 'push' for the move almost entirely generated by Scientific Support?

A: Yes, it was there and within 'Crime' [name withheld] was very supportive and gave me lots of advice about approaching the steering group. Support could have been better in Finance as this was our 5<sup>th</sup> attempt since about 1994 and they made me look at all sorts of financing options before providing the money entirely in force. That was silly and going around the Wrekin could have been avoided.

Q: What did you consider would be the biggest issues arising out of the move?

A: We had one chance and needed to get it right. Given my expectations, I was concerned whether it would be right! "

Excerpts from the transcript of the interview with Studyforce Scientific Support

Manager 25<sup>th</sup> September 2006

It is here that the snapshot ends. Over the next twelve months, the building work progressed; a 'moving in' plan was developed along with the ordering of new equipment and furniture. Each department was asked to produce a set of procedures so that the staff had a clear manual from the beginning and everyone should know what they were doing when they arrived in their new environment. We will see!

## **5 A Critical Review**

"Change management is rather like conducting an orchestra. One must energize and motivate, build cohesion, create a sense of pace and timing, and provide a skilled performance while sustaining the performance of others"

(Carnall 1995, p159)

In order to critique the outcomes of the research further, it is first necessary to summarise the proceedings and recap on events so far. PRINCE2, whilst a comprehensive and effective project management tool, appears to lack an in depth insight into the people issues that prevail in large scale change initiatives. Soft Systems, on the other hand appears to be better suited to these types of issues and cover them more comprehensively. Both techniques have been employed on this project through a combination of company policy and the desire by the project manager to ensure that the people issues did not overshadow the project through lack of comprehensive consideration.

### PRINCE2

As discussed at various stages throughout this thesis, the author found the PRINCE2 methodology rather restrictive and bureaucratic, but there was much benefit to having a formal framework on which to 'hang' things. Had the process been monitored more closely by the organisation, it can be acknowledged that it would have been followed more regimentally and in adhering to it, a better understanding of how it should be used would have been developed. OGC (2005) states that PRINCE2 is based on the experience of many project managers and therefore one would naturally assume that it was the way this methodology was used that resulted in its unsuccessful application in respect of this project. Indeed in hindsight, having gained more experience in

managing projects since this research was carried out, we can see how a structure of this nature would have benefited both the project and project manager.

Soft Systems Analysis

Soft Systems Analysis is quoted as being 'very sophisticated and mature: it requires highly experienced analysts and is dependent on a high intellectual input' (Wang and Smith 1988). Whilst it can be argued that studying towards a PhD would imply that the author has a certain level of intellectual input, she was certainly not an experienced analyst or indeed experienced in carrying out this type of work, and has sometimes found it difficult to work through the system using Checkland's original texts. He himself argues in *Soft Systems Methodology in Action* (1990) that this should not be the case and we would agree with use of some of the more basic models, but to carry out a comprehensive analysis, with multiple models can quite quickly become confusing and somewhat disorganised for novice project managers.

Soft systems analysis can appear bureaucratic to begin with, as there are so many root definitions and diagrams etc, but they are designed to make the analyst think through the issues at hand and so it was an extremely useful technique overall. It is ironic that the force is continually engaged in reducing bureaucracy and both this technique and PRINCE2 are embedded in it, but it may well be the author's continual search as a member of police staff for non bureaucratic systems that resulted in the immediate identification of this technique as such and therefore the reluctance in its use. At a time when the project manager has least time, the technique was involved and time consuming. This was, it is suspected, partly because it was introduced later into the

project environment than would normally have been recommended, and despite this, did raise a number of significant issues that may have been missed without the use of some form of technique as guidance. According to Checkland and Scholes (1990), the process of learning by relating experience to ideas is always both rich and confusing. But they conclude that as long as the interaction between the rhetoric and the experienced 'reality' is the subject of conscious and continual reflection, there is still a good chance of recognizing and pinning down the learning which has occurred.

Further through the project, some of the smaller issues became manageable enough to almost work through the process mentally, just producing a list of issues to analyse and then hopefully a list of potential solutions or adaptations of the process. The initial analysis started with the basic process and then a series of development meetings were held with the department managers to discuss potential solutions. These meetings also raised some new issues that required a more detailed examination using the technique.

There was a formal project management support programme that offered support, but only in terms of documentation and planning, not hands on assistance with the project subject. This appeared only to be ceremonial; there to tick the right boxes should HMIC wish to see evidence of its existence.

Ashforth and Gibbs (1990) explore this in more detail in their article in *Organization*Science, where they discuss the legitimisation of organisations. Perceived legitimisation, they state, is sometimes sought by organisations through the use of

explain the situation at Studyforce, is that of ceremonial conformity where an organisation adopts some visible practises that are consistent with social expectations while leaving the essential machinery of the organisation intact. In this way, the force would appear to be improving and complying with the requirements of the HMIC inspection, whilst effectively running business as usual. This appears to be backed up by the fact that there was no apparent policing of this process either, except through the monthly project board meetings. These meetings confirmed that the project was still running efficiently, but not that any criteria or reporting had been carried out on the project management system. In reality, as discussed in section 2.1 of this thesis, this did not unfortunately happen. 'Support' from the support programme was non-existent, merely symbolic.

It has been found in the author's experience that it doesn't seem to matter what consultation you carry out and how many people are involved, change can seem to bring out the worst in some people. It was discovered that even when you change things at someone's specific request to make the change process smoother, the same person may then complain again about either the new way of doing things or something else entirely! A quote from the project questionnaire that illustrates this is "consultation/communication was very poor from the start"," I feel in some areas consultation has been excellent and some average. I also appreciate that finding answers in a force this size is not always easy and progress normally hinges on more than just one person".

My initial thoughts are that the Soft Systems Analysis technique is drawn as a fairly linear process, although does not need to be followed in that order necessarily. Checkland (1981) discusses the use of the technique steps in order, but with iteration to ensure coverage of all aspects of the problem situation. From the experience gained during this case study, it has developed more like a spider's web in effect, each widening ring increasing in complexity and always interlinked with the ring or issues within it and around it. Everything expanding from a central issue, your problem area that needs looking at, caught in the web like a fly, always trying to move towards an improved situation. Each new issue affects those around it, within and outside itself. This also gives a better picture in my mind of the complexity of the work, whist still being able to make some sense of it diagrammatically. In my mind, this also shows the way one issue can then become a number of smaller issues, but many interrelated so that instead of breaking a problem down into a small manageable piece, it makes things more complicated.

When you attempt to resolve an issue it is interlinked to so many further issues that you can potentially make far worse. We see the various external 'pulls' on the project, or web as the strands attaching the web to stable surfaces, like the government (Individual governments can be unstable, but government itself is as predictably stable as it can be). Although the surface may be stable, if the strand becomes thinner or breaks, the stability of the web is lost, even though the external anchor is still stable. These various 'anchors' pull the web in different directions and cause additional stress on the whole structure of the web, or project.

The complexity of any project or situation will be increased; sometimes significantly, by the fact many actors and stakeholders are autonomous professionals using their own experience and judgement. They will invariably have their own agendas that will come into play within the dynamics of the process. (Checkland & Scholes 1990) The changes envisaged on the project were to have such a major effect on the department that it would inevitably lead to some empire building and self positioning of some staff, particularly the managers who had substantial influence on the process.

As Machiavelli so succinctly put it in his book *The Prince*, to act virtuously may not help when others are not so virtuous! This documented experience of trying to be as honourable and honest as possible with the staff during the consultation process became a very unpleasant experience. The more information that was provided to the staff, the more detailed information the staff 'demanded'. Further to this, the more rumours were also introduced to the process; therefore the additional clarity resulted in the promotion of even more uncertainty, which was counter productive.

It would have been wiser to take Machiavelli's advice and make a judgement as to whether virtue and correspondingly honesty and openness, should be used or not depending on the current set of circumstances and the people involved. Having allies can help, if they are not also working to their own agenda. The department managers were allies to the project manager in some respects, including making the process more palatable to staff, but their own agendas can be seen to mean that they were sometimes magnifying issues which staff raise in order to meet their own aims e.g. additional benefits to their own department. Actor-Network Theory also has

something to say on this matter "Not only do actors vary in size, so that they may represent fewer allies than they claim to stand for, but they may also bring into play far more actors than anticipated. If there are fewer of them, the project loses reality, since its reality stems from the set of robust ties that can be established among actors; if there are too many of them, the project may well be swamped by the erratic intentions of multiple actors who are pursuing their own goals" (Latour 1996, p 71). This can clearly be seen in the case study later in the project when the more detailed submission processes are being developed. Multiple actors with multiple intentions cannot seem to come to agreement over the best way to deliver the service and the project manager therefore referred the decision to the Scientific Support Manager in order to prevent a delay to the project (Project Twelve month snapshot, December entry, pages 115-119). The world of the project manager and bringer of change can be a perilous place. The balance is very delicate between information needed to reduce uncertainty and enough information to allow rumours to be rife and panic spread. The project manager, like many before her, found herself janus-faced, in having to face more than one aspect and group within the organisation. On one hand, the senior management can be seen to be manipulating the level of information released in line with official sign offs and on the other, the project manager's knowledge is such that not all of the information may be released, for any number of reasons e.g. again awaiting official sign off of human resource policies. This was never intentionally acted out for deceptive purposes, but may have been interpreted as such by some members of the staff who felt that they were being paid lip service rather than being allowed to genuinely participate and influence the proceeds. The staff consultation meetings were a genuine attempt to involve the departments and allay some of the fears or

concerns people may have had, but lost their positive impact due to the blocks on information that occurred through the hierarchical nature of the organisation.

Carol Linehan and Donncha Kavanagh, writing in Hodgson and Cicmil (2006, p52) discuss this further in terms of the project ontology. Our understanding of the nature of the world and of existence will underpin the set of practises that inform our project management. Sometimes, when we believe we are trying to improve a situation, we are in fact, making it worse or becoming the source of further problems. Linehan and Kavanagh believe this is caused by 'dysfunctional interventions' made by the project manager due to their own ontological stance. "What one person sees as a 'problem', others may see as a 'nuisance', an opportunity', or a 'disaster', a 'storm in a teacup' or a 'joke'. In other words, problems and issues are *interpretations*, and interpretations are always based and consequential on our world view or ontology"

Hodgson and Cicmil (2006) conclude that there is a crisis in the field of project management due to the direction recent studies have taken which leave the techniques and models limited and failing. Indeed they cite such techniques as PRINCE2 as the government's attempts to prevent the number of embarrassing and public failures of major projects by developing and promoting the technique with the UK Office of Government Commerce. Even so, PRINCE2 focuses on the traditional three components of project management; Time, cost and quality, whilst many argue against these criteria alone being used as the focus for good project management as this restricts the project managers ability to deal with social issues that arise. Critical authors, such as Hodgson and Cicmil argue that there is a far bigger picture to manage

within projects, including who is included or excluded from decision making within the project and how multiple agendas are managed within the decision making process.

Latour also discusses this array of actors and there influence over the project. "The actors in a technological project populate the world with other actors whom they endow with qualities, to whom they give a past, to whom they attribute motivations, visions, goals, targets, and desires, and whose margin of maneuver they define"

(Latour 1996, p162-163). In other words, even if we draw a line around those actors we consider to be relevant to the project, other actors may still influence the project by exerting influence on actors within that line.

This makes sense, as projects are not just processes and success criteria; they are also about people and their agendas and actions and the whole complex nature of how these interact within the project and the outside world. Unravelling this complexity in the simplest of projects is an unenviable process and it is therefore easy to see where large scale projects involving many people, often unravel and fail without the correct management of all the interwoven issues, including the wider political issues. In addition to this, there is the contextualisation of the project itself within the wider world. Not only will this have an influence over the actors, but also over the project itself. In *Aramis*, for example, the project drifted in and out of political favour, but also if the public aren't prepared to use the transport due to wider issues such as personal security etc. the project will not succeed as the market will not be there. "The only thing a technological project cannot do is implement itself without placing *itself* in a broader context. If it refuses to contextualize itself, it may remain technologically perfect, but unreal" (Latour 1996, p127).

In the case study, the wider context needed to be in place before the project was even approved. There needed to be agreement that forensic evidence would play a major part in future detections in order for the funding to be justified, along with all the other issues discussed through out this thesis such as unsuitable accommodation and logistical problems.

If we revisit Summa (1992) for a moment and the endless pursuit of better, it can be seen that the rhetoric of management efficiency discussed by Summa is still very much in existence within the public sector today. Strategies to improve efficiency abound, while the endless pursuit of 'value for money' hangs over every policy decision within an organisation such as the police force. According to Summa, the problem of policy making was understood as a technical problem of coordination and adequate data, not a political problem of creating a common will. We would suggest that this can be seen to be reflected today in the policy making decisions of the police force. The commitment of police officers to the protection of the public can be seen as an existing common will and despite local policing initiatives, the use of resources will still be deduced from the available data on local crime types and patterns of criminality. As discussed previously in this text, the forensic policy itself is still derived from the success rates of various techniques and evidence types, despite the national priorities changing over time.

Summa also notes, using Finnish budgetary planning for housing as an example, that whilst some pieces of policy make it through the whole process and are implemented, some are 'stuck' at the lower levels of decision making, returning year after year in the

planning documents. But all is not always lost. In the case of the new Scientific Support site, the perseverance of the Scientific Support Manager meant that although it took a number of years, the project eventually made it through the layers of the planning process and emerged into policy planning and eventually became reality.

## "A personal view

The process of project management was found to be very frustrating because of the extremes. On one hand, important technical decisions needed to be made, like which equipment to buy and how much space should be used for each department, on the other hand the things that really make it happen are the smaller things that mean so much to the staff who will be working there, such as availability of parking, vending facilities and local shops. These things need to be clarified and any problems resolved quickly because the staff find them important, not just their new working environment. In some respects, they don't care what that is like as long as getting to and from the location is easy (although, of course, in reality the work environment is important to people). These are the people who will make the site really work and this is why the consultation process is so important, but so delicate. People must be able to trust you as the project manager to deliver the 'small' things as well as the bigger demands of the management and organisation because these 'small' things are huge issues to people.

Additionally to this, I found I only had 'nice' discussions in the kitchen or corridor, informal places.

Only objections and queries were raised in meetings, with one huge exception. I was told by a long standing member of staff that she had never seen such consultation occur and how refreshing it was to be part of it. Other than this, it was in more informal situations that positive points were made such as how someone was looking forward to the move and how much better it would be. It almost felt like people were embarrassed to be seen to be happy about the move and more comfortable being

part of the 'gang' asking regular questions. The questions also appeared to become more detailed and obsessive, for example having been told that there was enough parking spaces for everyone after some uncertainty in the early stages, I was asked:

"What size are the parking spaces at the site? Have they been reduced in size to accommodate the extra spaces required, as we were told there was not enough in the first instance?"

In order to settle this issue, I had to find out the measurements and compare them to our own car park to show that they were standard parking sizes! From outside, this may appear a minor point, but it had been festering to the extent that some members of staff had convinced themselves that their car would not fit in the car park and therefore they would have parking problems unless they bought a smaller car! This sums my point up entirely, what appear to be 'small' issues can be so important to resolve before they become major issues for no reason. I was also finding that some people do not want you to resolve any issues and when you do, they question further or find a new 'problem' to resolve, showing their resistance to the change."

Whilst change management theory can help us to understand some of the reactions to change and project management techniques hope to help us control the project itself, the project manager is still left with the conundrum of how to deal with not the issues raised by people, but the people's reactions to these issues, questions and responses.

The palpable tension between what is documented as real and that which was perceived plays throughout the case study period. Politics and policy have dictated, in some cases, that which is allowed to be released as real. It is the project manager who is left to juggle these 'realities', filtering them depending on which direction she is

facing, to ease the change process acting unwillingly like Machiavelli, whilst trying to fulfil her own moral obligation to keep everyone on the project informed.

Further tension was added by the genuine lack of information available on some points. This was a new and unusual project involving the large scale movement of Police staff, which in itself brought about the development of some new policies within the Human Resources department. These policies were extremely slow in developing and therefore added tension to the situation because the staff felt that they should be given priority by the force. Of course, at a force strategic level, there are many issues which warrant urgent attention and some level of priority had to be allocated. All of this provided a difficult platform on which the project manager needed to get a state of balance through the release of sufficient knowledge.

This balance was further jeopardised by the tension between how seriously the staff consultation group felt that their input was being taken; the difference between just being communicated to or their actual ability to be involved and influence the process. Were people being communicated to or where they actually being allowed to participate? If they were participating, was this acknowledged or did uncertainty and lack of trust mean that even though the process was participatory, they still assumed that they were being played lip service and actually had no sway in reality. In reality it can be difficult to convince people that a process is genuine. Many key issues are fixed and cannot be changed, for example in this case the location of the building which was the source of much dissatisfaction and many queries. It can easily be seen that by fixing this particular issue and not leaving it open to debate, people felt that they

weren't able to participate and change the factor giving the biggest majority of staff issues. This is despite the fact that there were many points that could, and were, changed by staff opinion, e.g. the way processes were developed and how rooms and equipment were set to make the working environment more beneficial. Or indeed the way the kitchen and rest rooms were laid out and equipped to be as comfortable as possible for break periods.

Returning for a moment to Latour, *Aramis* and Actor-Network Theory, comparisons can be made between the Aramis project and this case study material which demonstrates how easily the project could have failed, or as with Aramis, cease to exist in its desired form.

It is rather apt given the case study of this thesis, that the book *Aramis* is loosely based on the theme of a detective novel and the conclusions derived when all of the potential 'guilty parties' are brought together. Latour falls short of unmasking anyone, there was no scandal in the project, just a number of players, networks and departments with different views of the project outcomes, who ultimately failed to help 'Aramis' survive. According to Latour, 'Aramis' was fragile from the outset in many aspects just like many projects. Key in its failure though was its hypersensitivity to variations in its environment, including political changes. Latour writes "Two conversions, one definitive and the other tentative, transformed the Aramis project, which was at a standstill, into a political football. It was deliberately attached to the context of Right/Left alternation by the RATP company head" (Latour 1996, p151)

How easily this could have also affected our case study through changes in political direction or the successful application of the plans to regionalise and merger police forces.

If like Latour, we challenge all of the boundaries between people and things, technology and others, we can potentially view the project from a different perspective to soft systems and the rigidity of the PRINCE2 framework. Assuming that all those systems and subsystems are present at a point in time, in viewing them as networks we can see that other, more complex issues are at play in order to maintain, gain or even break actor network links. In *Aramis*, new technology was invented to create the system required for coupling cars. Although successful in prototype, the projects eventual failure demonstrates just how fragile those networks can be. In the same vain of *Aramis*, we have collected a montage of heterogeneous information, records and commentary in order to record the project process and see if it was indeed a success and why?

There is no doubt that physical success was achieved as this is evidenced by the completion of the project and through praise of the design. New services were put in place, but in terms of Actor-Network Theory, was that due to a successful project or pure luck as a novice project manager wandered through the process? Did shear will power and the desire to succeed make it so? Did this innate desire keep the networks of possibility and actuality of human activity together, albeit continually changing?

Latour discusses "A technological project is neither realistic nor unrealistic; it takes on reality, or losses it, by degrees." (Latour 1996, p 85). In making the project real, giving it substance through the photographs on the website and design drawings, it became open to the cultural aspects such as scientific, political and economic enthusiasms fired by its existence. If these fail to be engendered, the project, the physical building itself becomes less real. It is these enthusiasms which appear to motivate others and generate a 'buzz' about the project. Making it real through media like the website helped to engender further networks and links and to stabilise the situation. Latour goes on to write "The only way to increase a project's reality is to compromise, to accept sociotechnological compromises" (Latour 1996, p99). In the case of the Aramis project, the compromise never came and may have led to its ultimate failure to become real. On one hand the desire was to have a completely new innovation with the technology being developed to meet the concept and on the other, the desire to use existing technology to provide the best they could with existing methods. The resulting lack of compromise appears to have led to the stalling of the project. A similar situation was averted many times in the case study. Where there were disagreements on the way forward, the Scientific Support Manager made a decision and this stopped the project stalling on a number of occasions. I have since seen a number of other projects stall in this way where a lack of compromise prevents the project from moving forward.

One non human aspect of the project played a key part in ongoing events and network; the site location itself. It did not have a voice, but was considered a bad place, out of town; the villain of the piece! The "poor object" in Latour's words

(reference page number). A non-human actor that required equal respect and attention in order to view the bigger project picture and keep the networks together and the project on track. The stitching together of human and non-human actors whose interests and attachments are different and need translating to build the sociotechnical networks: in this case building, processes and people.

"I was aware when I first joined [Name withheld] 4 years ago that a single site was on the cards and have always felt that operationally it was a good idea"

"A bit disappointed with the late changes to the office accommodation – unnecessarysome concerns about capacity and storage. It is the best that could be done with this building"

"I feel I have been informed of all the structural developments and kept well up to date on how the build is progressing. Where I have lacked information is on the staff personal issues. ...Had I been able to answer these questions it may have eased the process for some staff."

Questionnaire Responses by the Scientific Support Management Team January 2006

"The client brief took a lot longer to establish than what we programmed for. From the initial meeting in April 2004 the entire brief was not established until the end of July 2004"

"Normally the enthusiasm of new occupants of a building results in a good working liaison and flow of information. The problem sometimes is to keep the expectations within realistic boundaries with clients who understandably have little experience in building costs and site limitations."

"We would normally liaise with individual departments, albeit we would ask for a single contact point within the department. It was Scientific Support who said they would have a single point of contact for the project"

Questionnaire Responses by the Design Team January 2006

The project in this thesis can clearly be seen to contain many existing networks that were broken and new ones reformed during the process of restructuring the department. During the Aramis transport project, it was the failure of the network, composed of different types of technology and thought processes that were considered, in Latour's opinion, to have caused the project's failure. There is no doubt that significant networks came under substantial strain during the case study project process, breaking some as part of the new 'vision' while entirely new ones were developed. The whole Studyforce project can be seen as a series of alliance building, not only between departments, but also between the project manager and members of staff in order to build up new alliances that would help to promote the project in a positive light and ease the uncertainty brought about by change. It may therefore be perceived that it was the lack of new network and alliance building that was the downfall of Aramis, where as the overall desire of the participants or 'actors' in the case study was strong enough to fundamentally keep a central network of sorts

together, whilst others changed around it. "The interpretations offered by the relativist actors are performatives. They prove themselves by transforming the world in conformity with their perspective on the world. By stabilizing their interpretation, the actors end up creating a world-for-others that strongly resembles an absolute world with fixed reference points" (Latour 1996, p194-195). In this way, it can be seen that by stabilizing in this way, you can encourage the participation of other actors and move the project forward with potentially less stress to the staff given that uncertainty and instability created much of the fear of change.

Throughout the networks there are also quasi-objects in play. These entities are brought into an almost physical aspect by their interplay within networks. In the case study and indeed within police work there are a number of quasi-objects or tokens in play, e.g. the inherent desire of police staff to seek justice or the desire of Staff to do their best with techniques to identify people. It could be surmised that it was these quasi- objects that formed a common bond between the old and newly developing networks and held the project together despite any number of potential failings; the common overwhelming desire to achieve justice. If this is the case, then it could also be surmised that despite many differences on projects, a project manager could potentially help to ensure success on their project by discovering what that token may be.

Latour discusses the concept of the 'black box' or subroutines within a project. Projects can contain many complex elements, but these are not always visible to the outside, or indeed, every actor in the project. The project can be placed as a 'black box' by the

organisation and deemed as either a success or a failure. In this case it was deemed as a success as the output from the 'black box' was a new building that met the purpose it was designed for and was within budget etc. The project manager involved in the project however is unlikely to see the project in this fashion, as she is aware of the fine detail, or sub routines, involved in achieving the outcomes. "And it is in the number of detours that we recognise a project's degree of complexity" (Latour 1996, p215.

Although she can be aware of the overall aim of the project and the full strategic picture, it is feasible that the organisation and project manager may view the outcome of the project differently. As Latour stated, the black box is revealed to be "composed of steps in sequence that integrate several human gestures" (Latour 1999, 183). In this way, she may feel some of the individual steps may not have been successful, while the overall outcome of the project was.

McLean and Hassard (2004, p499) help to sum up why project management, and in particular the issue of managing stakeholders within a project. can be so difficult and fraught with danger when they discuss the problem of where to 'cut' the network or draw the boundary on which actants should or shouldn't be included in the network. How is the researcher or project manager for that matter going to determine when an actants influence stops and which to follow?

The project and Department need to be nurtured as well as supported during the process and beyond, but what of the authors part as an actant? She will be considered equally with other actants, both human and non-human. In some respects this can be seen to mirror the discussion on at-home ethnography. She is indeed part of the

picture, but should take no more prominence or not than other elements of the network.

"To the multiplicity of actors a new multiplicity is now added: that of the efforts made to unify, to simplify, to make coherent the multiplicity of viewpoints, goals and desires, so as to impose a single theory of action. In the strange arithmetic of projects, everything is added; nothing is taken away"

Latour (1996, p168)

Lewin (1951) discussed the unfreezing and freezing of change. Acknowledge that change is required to unfreeze the situation, attempting to change existing behaviour e.g. the initial meetings held to discuss the new vision and service. Secondly initiating the actual change itself through the project; and then finally refreezing the situation by positive reinforcement of the change. The breaking and making of network bonds was not an instantaneous process, rather a tortuous process interweaved with each person's travel through the change process and each department's stage in its development process, but by reinforcement of the quasi-objects e.g. instilling the belief that the facility would be a place to be proud of, the change process continued. A professional service needed to be maintained between the unfreezing and subsequent refreeze, causing this period to be full of potential minefields where the mindset could slip back into existing pathways.

#### **6 Conclusions**

"It should be borne in mind that there is nothing more difficult to handle, more doubtful of success, and more dangerous to carry through than initiating changes in a states constitution. The innovator makes enemies of all those who prospered under the old order and only lukewarm support is forthcoming from those who would prosper under the new. Their support is lukewarm partly from fear of their adversaries, who have the existing laws on their side, and partly because men are generally incredulous, never really trusting new things unless they have tested them by experience. "

Niccolò Machiavelli *The Prince* (2004, p24)

It is the author's experience that changes are like an arcade coin fountain, little pushes building up until eventually everything overflows and creates an event. In this case a crisis for those who are resisting the change. It is often a small, maybe insignificant change or push that causes the event and therefore others often struggle to understand why a fuss is being made, when the true picture is a build up of a number of issues that have reached tipping point.

And so to respond to the research question that initially sparked this thesis "Can Checkland's Soft Systems Analysis still effectively meet the requirements of a fluid public sector organization in managing change, thirty years after it's conception?" and "Are more modern theories such as Actor-Network Theory more relevant today?"

During the course of this research, two complementary systems predicated techniques have been used with the aim of giving a greater foresight and comprehension to the authors work as project manager. Whilst both techniques gave her the intended insight and potential control over project events, neither explicitly discusses how to deal with the change and reactions to it.

It can be seen that Soft Systems Analysis, whilst comprehensive in its coverage, can be complex and time consuming, both of which aspects make it potentially slow to use and difficult in practice on a complex, fast moving project. Given ample time to carry out a thorough analysis, Soft Systems Analysis can give extensive insight into the root cause of change and therefore potentially bring about a regime that will satisfy the need for change after the change has been implemented.

In light of today's fast moving, ever changing world, this can mean that the analyst can be thwarted in carrying out as comprehensive an application as should ideally be pursued. It would be a feasible assumption that as this technique was used more and experience gained, then a more efficient application could be made, but in the respect of this application by a novice project manager, the technique proved unwieldy, but as suggested, that is just a personal observation of the author.

According to Patching (1990), Soft Systems Analysis should be used to complement rather than replace other techniques. Hard systems can be used to address parts of the problem that are tangible, such as numbers of techniques and staff.

In this way ANT can also be used to compliment the analytical process by giving an alternative, less personal view by treating all actants equally and potentially being much more clinical in its analysis.

At the outset of this project, the author ultimately sought help in understanding fully the different aspects of project work through use of these techniques. They did indeed succeed in giving a deeper understanding behind the momentum for change and how to envisage the ultimate result required from the change process, but failed to entirely support a novice project manager in dealing with some of the concepts identified.

Whilst it's true to say that project managers should be fully trained before being allocated work, and indeed in many organisations specialist consultant project managers are contracted to carry out major change scenarios, smaller organisations like Studyforce have limited resources and often allocate inexperienced project managers to deal with what they conceive to be minor organisational change.

As a result, future developments in this field and by the author might perhaps consider the amalgamation of these comprehensive analysts' techniques to provide a hybrid technique with useful advice for novice project managers that isn't based on gimmicky techniques and helps them to deal with issues that may arise. A framework, in other words, on which to structure the process of selecting suitable techniques for each particular project is required. In this way a more flexible paradigm is built on existing knowledge.

Ideally, it would be the author's desire one day to instigate research on the scale of Mass Observation, the study of life and people in Bolton which was conducted for many years starting in 1937, (Madge, Jennings and Harrisson (collectively known as Mass Observation) 1937) recording the day to day activity of life. Given the information on human nature gained personally by the author on this single case study, one can only imagine what wealth of information a similar study would bring to project management.

For now the author finds herself potentially and dauntingly once again in Checkland's shoes and taking the unsatisfactory use of one technique as the driver for examining the potential use of others. It is her interpretation of events that forms in her mind an image of every future project that she may manage or participate in, that of a three dimensional bricolage. Each project is formed of many aspects and elements that inter relate, even those that are not obviously so. Each project therefore needs to be dealt with in that context. A more visual example of these thoughts is the Rubik's cube, shown below.



Although this intriguing puzzle has been used to illustrate many theories, it is such a commonly known and therefore easily pictured example that it is worth using again to help the authors explanation of these thoughts. Imagine then that the cube is a project, each side a different aspect or element, each piece of a side consisting of different aspects within that arena, each interrelated and possessing the power to influence the position of the others.

#### Rubik's Cube

In this way also, it can be seen that even if one element of the project is well organised and running effectively i.e. one side of the cube is made up of the same colours, it doesn't mean that the entire project (or black box) is. It can be assumed that many readers will have suffered the frustration of achieving such a state whilst attempting to solve the cube. Elation at reaching a stage which appears to show that progress is being made, only to be shattered by disappointment as this then needs to be completely destroyed in order to actually solve the puzzle and line up all dimensions. All aspects need to work together through many twists and turns that appear unrelated to effect the 'solving' of the puzzle. A lesson all project managers would be wise to learn.

I have always believed that the experiences gained from my research should be practical and give my organisation insight, so that not only I learn from this process. It would not be an expectation that this additional research outcome would turn colleagues into experienced project managers overnight, but would guide them and the organisation to gain assistance from the relevant parties within their own systems or external professional bodies. I know that all I needed at the start of this project was a little push in the right direction and some support along the way. I hope this work will become that 'little push' for other project managers.

# 7 Postscripts: Project Update

"No matter how hard they try, criminals can't help shedding clues as they commit crime. Now it's about to get tougher as (Studyforce) unveil a hi-tech lab manned with scientific sleuths right at the cutting edge of crimebusting.

From the outside it looks like any other office housing a financial call centre or bank HQ, but this building has more in common with James Bond than Barclays. For behind the freshly painted façade of the building in the heart of (place name) lies the gadgets that have criminals on the run.....Inside the building is a dazzling world of swipe cards and pressurised labs, computers and microscopes."

Regional Evening Mail, p12, February 2007

The single site project was hailed a complete success by Studyforce, although as discussed in the previous section, this was due to the successful outcome rather than the journey that went before it. Before completion of the organisation's move to the new site, there were a number of further twists to the tale. In July 2006, the government announced it was putting a hold on plans to amalgamate forces across the region. A number of unresolved issues, such as who would be paying the cost of the reform meant that much wider consultation was needed. There are still currently no Government plans to resurrect this policy, although severe budget cuts due to the prevailing economic climate have meant that some forces are considering amalgamation to ensure maintaining a professional service.

The second building, at the rear of the site, that had been the subject of so much speculation was demolished in December 2006 and replaced with a further specialist scientific unit during 2007/2008, which would compliment the new Scientific Support facility.

A competition was run to rename the building and to help to launch the new identity of the department. The winners suggestion, Locard House was reviewed and found to have commercial implications, despite being a scientist's surname, a forensic supplier had also been named after him. The final name was suggested by a member of the senior management and approved by the project sponsor. The competition winner still got their prize!

The relationship that was to be developed with one of the organisation's partners, another emergency service, did not come to fruition. The partner organisation decided that moving to this site was not in line with their organisational strategic plans.

In the final month prior to the move, two departments were swapped over, office wise within the building and a new department was added to the move! Just after completion it was also decided that a further department should come under the forensic umbrella and be 'squeezed' into the department, therefore alterations to an open plan meeting area were commenced almost immediately.

In the three years since completion, change has remained the key theme of the department and site, even to the extent of changing some of the fundamental aims of the original vision. New management; new change; a never ending process. The endless pursuit of better (Summa, 1992).

My own role as project manager continued after the return of the Scientific Support Manager. He was immediately asked to work on a further project and although returned to take full control of the department, felt that the work on this move should be consistent and therefore I continued with the role throughout the life of the project. I enjoyed the experience extremely, despite the ups and downs.

So much so that on completion of the project I commenced a role with a construction company as a preconstruction project manager. I studied for project management qualifications, but still found that my most useful insight was gained during the course of this study and the writing of my thesis. Insight that I can now pass on to my colleagues, having the satisfaction that I will have achieved my ultimate aim for the research, to pass on the benefit to other project managers and my organisation in the hope that they too will gain an insight into the complexity of change management.

On a final note, the project finished virtually on time, delayed only by a last minute off site issue. This occurred with data cabling five miles away, so was not considered a failing of the project. It was on-budget with all of the departments settled into their new homes by the end of February 2007. Everyone who needed to park their car could..........after some initial difficulties due to the construction work remaining on the second building!

The Chairman of the Police Authority and the Chief Constable officially opened the building on Monday 2<sup>nd</sup> April 2007 and currently, in 2010 significant improvements in turnaround times have been recorded in a number of the departments. The Scientific Support Manager and therefore the force also achieved their wish, as the site has a reputation for being a world class facility.

# Glossary

Definitions in this glossary are from the Concise Oxford English Dictionary on line (<a href="http://www.askoxford.com/dictionaries/?view=uk">http://www.askoxford.com/dictionaries/?view=uk</a>) with police application added where necessary by the author.

Word	Definition
Identification	<b>noun 1</b> the action or process of identifying or the fact of being
	identified. <b>2</b> an official document or other proof of one's identity.
DNA Analysis (Genetic	<b>noun</b> the analysis of DNA from samples of body tissues or fluids in

Fingerprinting)

order to identify individuals.

Contaminate /

**verb** make impure by exposure to or addition of a poisonous or

Contamination

polluting substance.

Within legal terms, exposure to something which deems the

evidence unusable in court proceedings.

**Action Research** 

Action research is a <u>reflective process</u> of progressive <u>problem</u>

solving led by individuals working with others in teams or as part of

a "community of practice" to improve the way they address issues

and solve problems.

http://en.wikipedia.org/wiki/Action research

**Biometric** 

Biometrics refers to methods for uniquely recognizing humans

Identification

based upon one or more intrinsic physical or behavioural traits. In

information technology, in particular, biometrics is used as a form

of identity access management and access control.

http://en.wikipedia.org/wiki/Biometric\_identification

**Central Submissions** 

Department that acts as submission point and distribution point for

examination of forensic evidence.

**Chemical Treatments** 

Chemical treatments used in the enhancement of fingerprints and

footwear impressions from criminal evidence.

Classification

**noun 1** the action or process of classifying. **2** a category into which something is put.

— DERIVATIVES classificatory adjective.

Continuity

**noun** (pl. **continuities**) **1** the unbroken and consistent existence or operation of something. **2** a connection or line of development with no sharp breaks. **3** the maintenance of continuous action and self-consistent detail in the scenes of a film or broadcast. **4** the linking of broadcast items by a spoken commentary.

**Coroners Office** 

Office that deals with deaths of a sudden or suspicious nature.

Provides evidence for the coroners court and liaison with police forces.

Delta

The Delta is the area of the pattern where there is a triangulation or a dividing of the ridges. When recording fingerprints, the delta and the area between the delta and the core must be completely recorded.

http://www.fbi.gov/hq/cjisd/takingfps.html

**Donor** 

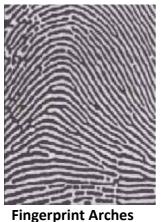
**noun 1** a person who donates. **2** a substance, molecule, etc. which provides electrons for a physical or chemical process.

— ORIGIN Old French doneur, from Latin donare 'give'.

#### **Empirical Research**

**adjective** based on observation or experience rather than theory or pure logic.

- DERIVATIVES **empirically** adverb.
- ORIGIN Greek *empeirikos*, from *empeiria* 'experience'.



Arches represent only about 5 per cent of the fingerprint patterns encountered. In arch patterns, the ridges run from one side to the other of the pattern, making no backward turn. There is ordinarily no delta, but where there is the appearance of a delta, no recurving ridge must intervene between the core and delta points. Arches come in two types, plain or tented. Arches by definition have no delta's. If the pattern has a delta then it is a loop and if it has more than one delta it is a whorl.

http://www.policensw.com/info/fingerprints/finger07.html

#### **Fingerprint Bureau**

Department that identifies potential offenders or eliminates innocent parties by recognition of their fingerprints.

**Fingerprint** 

**verb** increase the quality, value, or extent of fingerprint evidence.

**Enhancement** 

**Fingerprint** 

**Enhancement Unit** 

Department where chemical and visual treatments such as lasers are used to enhance the quality of crime scene fingerprints, with the aim of improving the chance of identification.

Loops constitute between 60 and 70 per cent of the patterns encountered. In a loop pattern, one or more of the ridges enters on either side of the impression, recurves, touches or crosses the



Fingerprint Loops line of the

line of the glass running from the

A Loop Pattern

delta to the core, and terminates or tends to terminate on or in the direction of the side where the ridge or ridges entered. There is one delta. On the right you will see a loop pattern. You will notice that it has one delta (shown in the blue box) and a core (shown in the red box). By definition the existence of a core and one delta makes this pattern a loop.

http://www.policensw.com/info/fingerprints/finger07.html

**Fingerprint Whorls** 

Between 25 and 35 per cent of the patterns encountered consist of

whorls. In a whorl, some of the ridges make a turn through at least one circuit. Any fingerprint pattern which contains 2 or more delta's will be a whorl pattern. In the scheme of classification you can make the assumption that if a pattern contains no delta's then it is an arch, if it contains one (and only one) delta it will be a loop and if it contains 2 or more it will always be a whorl. If a pattern does contain more than 2 delta's it will always be an accidental whorl.



http://www.policensw.com/info/fingerprints/finger07.html

Forensic / Forensically

**adjective 1** relating to or denoting the application of scientific methods to the investigation of crime. **2** of or relating to courts of law.

- noun (forensics) forensic tests or techniques.
- DERIVATIVES forensically adverb.
- ORIGIN Latin *forensis* 'in open court, public', from *forum* 'what is out of doors'.

**Participant** 

noun

Observation

a technique of field research, used in anthropology and sociology,

by which an investigator (participant observer) studies the life of a group by sharing in its activities.

http://dictionary.reference.com/browse/participant+observation

**Police Community** 

A uniformed non-warranted officer employed by a <u>territorial police</u>

**Support Officer (PCSO)** force or the British Transport Police in England and Wales.

PRINCE2

PRojects IN Controlled Environments (PRINCE) is a project management method. It covers the management, control and organisation of a project "PRINCE2" refers to the second major version of this method and is a registered trademark of the Office of Government Commerce (OGC), an independent office of HM <u>Treasury</u> of the <u>United Kingdom.en.wikipedia.org/wiki/PRINCE2</u>

**Public Sector** 

**noun** the part of an economy that is controlled by the state.

**Reflective Practitioner** 

A 'reflective practitioner' is someone who, at regular intervals, looks back at the work they do, and the work process, and considers how they can improve. They 'reflect' on the work they have done.

http://www.sharpy.dircon.co.uk/index\_files/ReflectivePractitioner Definition.htm

**Scientific Support** 

Depart which manages all forensic departments with the aim of supporting investigations and police activities through the use of scientific techniques including fingerprint identification, video enhancement and DNA analysis.

**Secondary Transfer** 

**noun** the transfer of new technology from the originator to a secondary user, especially from developed to underdeveloped countries

**Soft Systems** 

Methodology

Soft systems methodology (SSM) is an approach to organisational process modelling (business process modelling) and it can be used both for general problem solving and in the management of change. en.wikipedia.org/wiki/Soft\_systems\_methodology

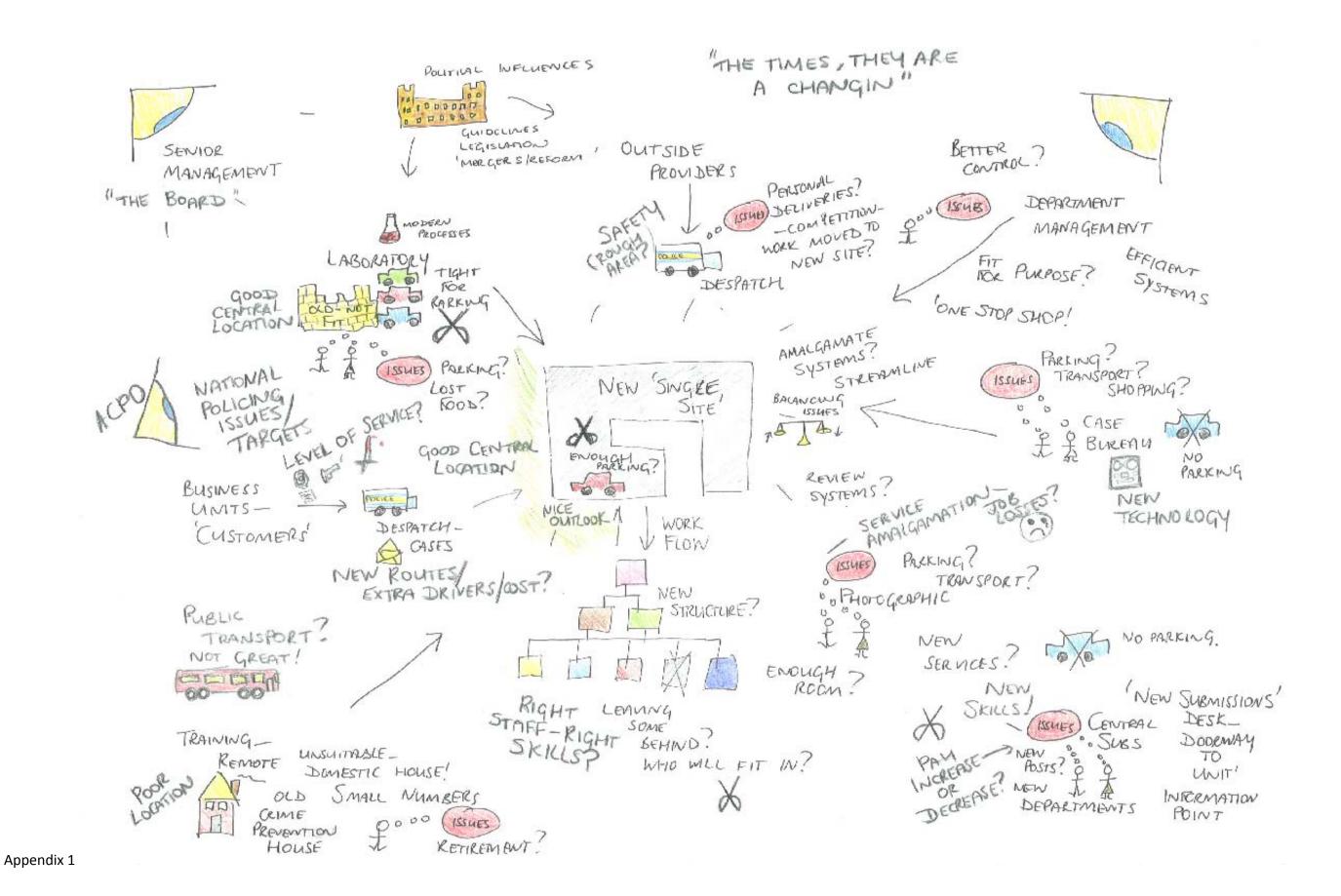
Studyforce

Pseudonym used by the force being studied to provide anonymity.

**Toxicology** 

**noun** the branch of science concerned with the nature, effects, and detection of poisons.

— DERIVATIVES toxicological adjective toxicologist noun.





We entered into a major piece of work last year in response to the then Home Secretary, Charles Clarke's an-

	We entered into a major piece of work last year in response to the then Home Secretarly, or the study carried out by Her nouncement of a programme of reform of police structures. This came about following a study carried out by Her nouncement of a programme of reform of police structures. This came about following a study carried out by Her nouncement of a programme of Constabulary which stated that current policing structures are no longer fit for purpose.
*	Last September, the Home Secretary asked for police forces and authorities to identify solutions which would entained them to have the capacity to deal with terrorism and serious organised crime, whilst providing local neighbourhood them to have the capacity to deal with terrorism and serious organised crime, whilst providing local neighbourhood policing to national standards. The Home Secretary called for a final report on a preferred option to be presented by
	By the end of October 2005, Police Authority and force having worked in close cooperation with the authorities and forces of polices.  Assessment guidelines, produced by the Home Office were used to evaluate the possible options and from this evaluation, it clearly emerged that a regional option would create the greatest opportunities to enhance neighbourhood policing whilst providing protective services.
	The Authority then entered into a process of extensive public consultation by contacting media, stakeholders and partner organisations and a series of public consultation meetings were held across the
	By 2 December, force and Authority together with the forces and authorities of submitted a report identifying a for force regional option as delivering the best policing solution. However the Authority raised significant issues on the costs, Human Resources and governance issues of this option together with major concerns on its impact on the costs, Human Resources and governance issues of this option together with major concerns on its impact on the costs of the costs
	Constabulary force and Authority preferred an option which would result in their retaining a stand another
	On 6 February, Charles Clarke indicated that the four authorities should submit a voluntary request to go rowards with the regional option. In the absence of reassurances over finance, governance and human resources, the Authority was unable to make this request. The Home Secretary therefore initiated a four month period of consultation that the before could be regien to the proposal.
*	gion to amalgamate.
	Chairman of the Authority, distribution said:
	'Throughout the process, we stressed to the government, that we would not commit the people of the into any agreement without first receiving proper reassurances that the areas of finance, governance and human resources would be addressed to our satisfaction'.
	'The Home Office has been unable to address the concerns we had raised'.
	'We will now strive to ensure that we make best use of the lessons gained during the work undertaken and decare around Police Reform. We will continue with our colleagues to work with the Home Office to gain clarification over around these for the future direction of policing'.
	On the suggestion for further collaboration between forces, Councillor said that this region has an excel-
	The line of that the best way to enhance it would have been the creation of a single strategic force, she said.
	During the course of working towards police reform, police authorities and forces across the region have acknowledged that there is 'gap' for protective services, which still needs to be tackled. The Authority was pleased that the Government recognised the region's need for additional funding to address the protective services gap. It is hoped that the government's commitment to providing funding will continue as we work to address this issue in the future.
	wwwpa.jos.us
	16 SEPT 2007

2



#### Police forces submit merger plans

and Police have submitted their responses to plans to restructure the country's forces.

All four have included merging into a strategic regional body as one of their options, the strongest option according to Police.

options.

The Home Secretary plans to reduce the number of forces from 43 to 30.

Whilst the regional option in our assessment is the strongest, it may not end up as the preferred one Chief Constable

The reorganisation of the UK's policing is in response to the increased threat from serious and organised crime, terrorism and extremism.

The government will give feedback to the various forces in November.

On Thursday, was named as the best performing metropolitan force in the country for the second year running.

Its options also include a smaller merger between and and

Police Chief Constable, said: " We welcome this opportunity to shape policing for the future.

"Our scoring using the Home Office assessment criteria shows the regional option, to merge with police, is the strongest one.

"There is still much work to do and whilst the regional option in our assessment is the strongest, it may not end up as the preferred one.

'Local views important'

"The Home Office have yet to examine all options submitted and give us their views."

A strategic regional force would operate with more than 13,000 police officers and about 21,000 staff.

Police said it was still to agree on a single preferred option and is also considering the possibility of merging with and and and and and also.

https://www.said: "The views of local stakeholders, partners and citizens are very important and I urge local people to share their thoughts with us."

http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/1/hi/england/29/10/2005

Police said early consultation suggested the most desirable option was to join with the whole region - it will be holding public meetings.

Police Authority revealed its plans last week and said the option to stay as it is was was viewed as a serious option for consideration.

They have also submitted plans for the amaigamation of Police and Police and Police.

Final detailed proposals will be submitted to the Home Office by 23 December.

Glary from 1901 Asialist Action programment and another configuration of the constraint and another and another constraint and another co

gir sayılımını

http://newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/1/hi/england/29/10/2005

Message of the Day Page 1 of 1

# Authority submit merger options - press release

As part of the review into police force structures prompted by a recent report from Her Majesty's Inspector of Constabulary (HMIC), Constabulary (HMIC), Constabulary Police and the Police Authority have today submitted their assessments to the Home Office.

Police forces and police authorities were asked to review their current structures and submit proposals creating police forces of sufficient size to provide effective and sustainable neighbourhood policing and a protection to the public against more serious and sophisticated activity.

The HMIC report identified a need for police forces to move away from the current structure of 43 police forces and goes on to say the current structure is not sufficiently robust, particularly within smaller forces, to provide the appropriate level of 'protective services', such as major investigations, terrorism and civil contingencies that are increasingly necessary.

Chief constable said: "Yesterday's release of baseline and PPAF assessments showed PPAF Police to be the best performing metropolitan police force in the country for the second year running. This process is about moving towards the policing of tomorrow.

"We welcome this opportunity to shape policing for the future. Fundamental to this is a commitment to improve neighbourhood policing at a local level and strengthen delivery across the whole range of protective services, keeping public protection as a top priority.

"We are working closely with the Police Authority, consulting internal and external stakeholders and together we have identified three viable options:

- The first is to stay as we are
- The second is to merge with Police, creating a new service
- The third is to merge with Police, again creating a new service.

"Our scoring using the Home Office assessment criteria shows the regional option, to merge with (Company), (Company) and (Company) Police, is the strongest one

"There is still much work to do and whilst the regional option in our assessment is the strongest, it may not end up as the preferred one. The Home Office have yet to examine all options submitted and give us their views."

The Home office will be examining submissions from all police forces and police authorities and asking for further work on the most promising options in an effort to identify the 'preferred option'

, Chair of the Police Authority said: "The Authority and the force have already engaged with other forces in the region, partners and political leaders and we have organised joint public consultations, next month in an and outcomes from this should build upon our excellent performance, improve local delivery and strengthen regional capabilities. Our priority is the protection of the public."

For more information, see the Police Reform website under A-Z or Personnel.

30/10/2005

#### Home office feeds back on merger proposals

The region's police forces, and their Police Authorities have now received feedback on their restructuring proposals.

All forces were asked to submit their most promising options following a report, earlier this year by HMIC, which concluded the current structures were not fit to meet future policing needs.

The Home Office examined all proposals and listed two options suitable for further progression.

- The regional option a merger of all four forces and
- Two strategic forces a merger between and a merger between and the strategic forces a merger between the strat

The Home Office, who have been working with police forces and Police Authorities during September and October, strongly advised that it would be beneficial to devote the majority of time in developing the regional option. This was found to be both operationally and organisationally stronger. All forces had submitted this as one of their most promising options.

The region's police forces and Police Authorities have already been working together in submitting the initial proposals and yesterday senior officers agreed to put a regional team together for the continuing work towards this option.

DCC said: "We welcome the feedback which sends out a clear message that the regional option is the one we should concentrate on. Our analysis showed this would bring the greatest benefits to people in the region.

"The public have the potential of being served by the best regional police force in the country. The region has a history of working together and recent independent reports showed the region contains some of the top per

"Central to this reform is our commitment to improving local delivery, through neighbourhood policing, and strengthening our ability to deal with protective services such as counter terrorism, serious organised and cross border crime, civil contingencies and emergency planning.

"No final decisions have been made and we are still in the review phase of this process. There is an enormous amount of work to do and challenges to face whilst keeping focus on our core activities."

Chairman of Police Authority, Said: "We stand on the brink of an historic change, which will be significant to the futures of us all. The highest priority will be on continuing the development of local policing. Great emphasis is placed on maintaining our high level of performance whilst strengthening the links, which bring policing closely in tune with neighbourhoods and communities.

"The people of the dissemble are fortunate in having a diverse Police Authority with members who are closely linked with their communities and able to bring a broad range of

14/11/2005

concerns into consideration.

"Our ongoing priority is to seek people's views as much as possible. We actively encourage our stakeholders and communities to come and engage with us in consultation. To date we have sent out around five thousand letters to stakeholders including both individuals and organisations, and this Saturday at 10am we will be holding three open public meetings at Council House, Council House and Council Methodist Central Hall."

Forces are expected to work up a detailed cost-benefit report of the 'preferred option', which then requires validation and refinement before it is submitted to the Home Office on 23 December. Any final go ahead will be given by the Home Office early next year.

Members of the public can access further information from our websites www.

police.uk or www.

or writing to the force or Police Authority via:

contactus@\_\_\_\_\_police.uk police-authority@\_\_\_\_\_blice.uk

#### Appendix 3

#### Q: Who is on the 'project team'?

The project board are:



We have additional members join us when relevant e.g. CSupt commander when staff were being transferred from to other sites.

A project team also exists, consisting of all the Scientific Support Managers whose departments are moving. This team collects relevant departmental information for the project such as new specialist equipment requirements etc.(15/11/05)

#### Q: Where will the Scientific Support Single Site be?

The Police Scientific Support Single Site will be situated at Police Station. The existing building will be renovated and an extension built.(24/10/05)

#### Q: What departments will make up the Scientific Support Single Site?

The Scientific Support Single Site will be made up of Central Submissions, SICAR, Scientific Support Intelligence Unit, Fingerprint Enhancement Unit, Scene of Crime Training, Fingerprint Bureau, Photographic Department, Video Imaging Unit & the DNA Bureau. (24/10/05)

#### Q: Is the move definite?

Yes, the move is 100% definite. The Police Authority has granted its full approval.(24/10/05)

## Q: Why was chosen? Why choose a site outside the City Centre?

The decision to locate to was made corporately.(24/10/05)

#### Q: When will the building work begin?

The tender has been approved and building started on 24th October 2005.(24/10/05)

#### Q: How will the actual move take place, will it be phased?

Yes, the move will be phased. A schedule will be developed to incorporate all aspects of the move from machinery / equipment to personnel. We still need to provide a service to the Police during the move; careful planning and scheduling should ensure minimum shutdown and a smooth transition.(24/10/05)

#### Q: Will there be a visit planned for everyone to see the site?

is currently out of bounds due to ongoing building work. The finished building will be unrecognisable from the current building. It may be possible at a later date to arrange visits to departments, but this is likely to be near the end of the process for safety reasons. The builders will be providing photographs of the site, which I will be putting onto the website, to show how work is progressing.(15/11/05)

#### Q: How secure will the site be?

We will be requesting 24 hr security for the building. Visitors access will be escorted only. There are currently two vehicle barriers that restrict access to the premises/car parks; these barriers will remain in place.(24/10/05)

#### Q: How will access to the building be controlled? Will it be swipe card?

Although a lot more research needs to be done in this area by the project team, we are hoping to use a combination of a swipe card and pin number that will also act as a time clock and alarm control.(24/10/05)

#### Q: Will the impractical neck ID's be re-evaluated?

The neck ID's are current force policy and cannot be reviewed as a Single Site issue. The neck ID's have recently undergone improvement and will hopefully be more practical for all police staff / officers. However, the Force are reviewing the current Security ID system and policy may be changed.(24/10/05)

## Q: The Photographic Department currently takes photographs of Police Officers and Staff for the purpose of Security ID / Warrant cards. Will this continue?

As above, the Force Security ID system is being reviewed. The practicalities of continuing to use the Photographic Department for this task will have to be considered as part of this review.(24/10/05)

#### Q: Will there be Fire Marshals and First Aiders?

Q: Will we be able to have shorter lunch hours (say half an hour) to enable travel links with buses/trains?

Yes, you must have at least half an hour's lunch break, and again, all shifts must be staffed sufficiently to cover the contingencies of the service. This will need to be discussed further with your department manager.(15/11/05)

Q: Will there be any additional allowances to those who have to spend additional money on second cars, travel passes etc?

No, there are no further allowances available in force for these items, although the force does manage a discount scheme for rail/bus travel cards.(15/11/05)

Car Purchase Scheme: What run a scheme called which is advertised on the Sports and Social Club Website. (06/02/06)

Car Insurance: Cheaper car insurance is available through Commercial Vehicle

Direct as advertised on the Sports and Social Club Website. (06/02/06)

Q: Can help be provided for those who have to pass a driving test in order to get to Such as some concentrated lessons from the driving instructors?

No additional help can be provided with driving lessons, but, the Police Sports and Social Club now offer discounted driving lessons with the AA Driving School. For more details, click on the link below.(16/12/05)

http://intranet/sports/2002/drivinglessons.htm

Q: Will there be a pool car for the use of going to court etc?

Yes, there are two existing vehicles in the department used for court appearances and scene examinations. These will be going with us to (15/11/05)

Q: At the last meeting (Personnel Manager at the time) agreed to catch the number 11 bus to look at the travelling that some members of staff will have to do in order to get to work and back. Is anyone else going to volunteer to do this? If not, why not? Is it understood that some people's journey times are going to double or more!?

Members of the consultation group and a number of colleagues have trialed a number of journeys into to test the feasibility of their journey on public transport and traffic levels. This is recommended if you think you may have difficulty in journeying to If this turns out to be the case please contact HR Officer for Crime Support to discuss available options.

Q: Will there be any flexibility on shift patterns?

## Q: As the site isn't situated by any great amenities for food etc. Will there be adequate facilities for everyone to store and cook food e.g. fridges/freezers?

Yes, any fridges, freezers or microwaves etc. owned by Scientific Support will be moved to and as part of the evaluation into requirements for new furniture and equipment, any additional items will be purchased as necessary.

We are also going to explore ideas for the provision of vending machines to the site.(15/11/05)

#### Q: Will there be lockers / storage for coats and personal items?

Yes, depending on individual requirements / usage, a combination of lockers and coat hooks will be provided.(24/10/05)

#### Q: Will there be a gym?

There are no plans for a gym on site, however, if enough interest is shown, we could research local gyms and maybe negotiate a discount.(24/10/05)

Two gyms currently offer corporate membership to us: Holmes Place at (10% discount) and LA fitness in (£29.99, but day/time restrictions). Latest details will be provided nearer the move. (06/02/06)

#### Q: Will there be a Personnel department?

Personnel issues will still be the responsibility of Crime Support based at An administration department within the Scientific Support single site may deliver functions such as annual leave, sickness reporting and purchasing requests. (24/10/05)

#### Q: Will there be a post room?

Yes, although it is unlikely to be in the same form as the one at Lloyd House. The project management team are currently looking into different options relating to submissions to the Single Site. Consultation between the project team and current submissions officers is ongoing.(24/10/05)

#### Q: What will happen regarding exhibit deliveries / collections?

As above, part of this research is to look at the most efficient despatch system, as OCU's now have one stop for all their forensic exhibits it should be a lot more efficient.(24/10/05)

#### Q: Will a smoking room or area be provided?

There is no provision for a smoking room, but a smoking area will be identified.(15/11/05)

#### Q: Will a prayer room be provided?

The team are currently in the process of identifying a suitable location for both a prayer room and an area for expectant or nursing mothers.(15/11/05)

Q: Why has there been no consultation on furniture requirements etc. particularly specialist requirements.

Some initial consultation has taken place with managers to put a relevant budget in place for the furniture. Detailed requirements will be looked at over the next few months with a view to ordering later this year. Where specialist equipment is needed, consultation will take place to ensure the most suitable equipment is purchased. Some existing office furniture will be moved with us if it does not need replacing e.g. standard desks and chairs.(15/11/05)

#### Q: Will there be a secure car parking facility for all personnel?

The car park will be secure with a barrier restricting general access; security guards have been requested to control the site. After detailed examination of the fact finding survey and the number of spaces available at the site, it has been confirmed that, contrary to our previous thoughts, there will be sufficient parking available within the rear car park of for all personnel wishing to park there.(15/11/05)

#### Q: Will there be motorcycle and pedal cycle bays available?

Yes, a covered motorcycle/pedal cycle shelter is being provided at the site. (24/10/05)

#### Q: What public transport options are available?

Click here for a link to the <u>website</u> which contains a journey planner to help with all your public transport options.(24/10/05)

Below is a link to a the Travel Number 26 Bus route,



#### Q: What other transport options are available?

Once the information from recently submitted travel surveys has been analysed, the project team can look into other travel arrangements. The practicalities / usage of a shuttle bus from Centre to the site will seriously be considered. Car sharing is another option that may work for some people.(24/10/05)

Q: What support is there for those who rely on public transport?

Shuttle bus from the city centre to

The idea of a shuttle bus has been costed and discussed, but is not financially viable and therefore will not be provided.

Shift patterns to take into account extra travel time?

Shift patterns have just been reviewed in all departments.

Q: How would a shuttle bus fit in with shifts?

This is no longer applicable, see above

Q: If a mini/shuttle bus is arranged, where will it run from, how long for and how will this service be paid for?

This is no longer applicable, see above

Crime Support HR Manager will be addressing any remaining issues on an individual basis. Please contact her should you need any further advice in relation to personnel and financial queries.

Q: Would the shuttle bus be our clocking on point? No, clocking in will always be carried out at (15/11/05)

Q: Could there be a facility on this website for people to advertise car sharing facilities?

Yes, a web page has been developed as part of this website for staff to leave messages relating to the single site project. <u>click here</u> (24/10/05)

Q: Will there be an excess travel allowance?

Yes, if your new journey to work incurs additional cost, that additional cost will be reimbursed for a four year period.(24/10/05)

#### Q: Who would be entitled to excess travel allowance?

Every member of Police staff is entitled to the allowance if their new home to work distance is longer.(15/11/05)

Q: How is excess travel measured, particularly if you are changing your mode of travel? Is it paid in arrears? How will car sharing affect these allowances?

### CIVILIAN PERSONNEL DEPARTMENT (EMPLOYMENT SERVICES DIVISION)

### Scheme for the payment of excess traveling allowance

No applications should be submitted. These will be dealt with by Departmental Managers at the appropriate time.

Notes for Guidance

MS Word

28 5 Kh

Download

## How do you calculate excess travel if they currently travel by train, and will travel by car to the new site?

-The Police Support Staff Council handbook states:

An employee who incurs additional travelling expenditure as the result of a change in work location determined by the Police Force, but who is not required to move home, shall be paid an allowance equal to the difference between the cost of travelling from his/her home to the new place of work and from home to the old place of work. The allowance should be based on either;

- (a) standard train fare and/or bus fares or,
- (b) locally determined mileage allowance in respect of the additional mileage actually involved in the change of employment if the employee is an authorised car user or where public transport is not available,

whichever is actually incurred.

\*\*Please note that in any mileage claim it is always the shortest route used for the calculation, as per Force Procedure A6 (Allowances - Travel, section 2f)\*\*

The application form for excess travel allowance does not cover this eventuality and colleagues will be asked to write a white report (form MG401) explaining the circumstances and cost difference. A test case is being submitted this month and other individuals should not claim at this stage. Line managers will be informed when this process is to take place.

## Q: If a person Car shared, how would you work out the excess allowance - divide it by two?

Each driver will claim for the number of journey's that they have actually driven each month. Therefore if the driving is shared, the costs are shared. (09/05/06)

## Q: How do you calculate excess travel if they currently travel by train, and will travel by car to the new site?

In these circumstances, excess travel will be calculated using the method of transport that will be used for the journey to Bromford Lane. Therefore in this example, car mileage will be used and calculated by subtracting the existing home to duty from the new home to duty.

\*\*Please note that in any mileage claim it is always the shortest route used for the calculation, as per Force Procedure A6 (Allowances - Travel, section 2f)\*\* (09/05/06)

#### Q: Will there be any compensation made for additional travelling time?

There is currently nothing in place to recompense staff for additional travel time.(24/10/05)

## Q: Will the increased travel times / accessibility to site be of detriment to the call out service provided?

Some staff may have longer or shorter call out times due to the sites location, where staff are dependant on public transport it may be totally impractical, but this would also currently be the case at existing sites. If you have specific concerns regarding call outs please discuss this locally with your departmental manager. (24/10/05)

## Q: Could shift patterns / start times be scheduled outside of rush hour traffic?

Many staff already follow a shift roster where start / finish times are scheduled outside rush hour times. It may be possible for staff who work set hours (for example 8-4) to start / finish at a different time, discussions with your line / departmental manager may resolve individual issues. However, the project team will discuss in more detail all aspects of working hours.(24/10/05)

## Q: Due to extra time spent travelling (up to 2 hours extra per day), will it be possible to work a 4-day week?

Potentially yes, under specific circumstances, but all shifts must be staffed sufficiently to cover the contingencies of the service and this would only be considered on an individual basis.(15/11/05)

## Q: If, after serious consideration, it is not possible for me to make the move to composition, what options do I have?

If you find yourself in this position then please speak to your line / departmental manager or Crime Support personnel as soon as possible. Click here for a link to the <u>Personnel website</u> giving details of the alternative employment scheme.(24/10/05)

http://intranet

#### Q: How can I get in touch with the Project Team?

An E-Mail account has been created: Scientific\_Site. Please submit all enquiries to this account and your question / comment will be forwarded to the relevant person/department for action.(24/10/05)

#### **Bibliography**

- Novel Technique has Explosive Forensic Applications 2009, University of Leicester Graduates Spring Review, University of Leicester.
- APM Body of Knowledge, 2006, 5th edn, Association for Project Management, Buckinghamshire.
- Jones, C & Munro, R (Eds) 2005 *Contemporary Organization Theory*, Blackwell Publishing, Oxford.
- Police and Magistrates Courts Act 1994, TSO.
- Alcadipani, R. & Hassard, J. 2010, "Actor-Network Theory, organizations and critique: towards a politics of organizing", *Organization*, vol. 17, no. 4, pp. 419.
- Alvesson, M. & Deetz, S. 2000, *Doing critical management research*, Sage, Thousand Oaks, Calif.; London.
- Alvesson, M. & Wilmott, H. 2003, *Studying management Critically*, Sage, Thousand Oaks, Calif.; London.
- Alvesson, M 2009, *At-home ethnography: Struggling with closeness and closure* in Ybema et al (Ed) Organizational Ethnography, Studying the Complexities of Everyday Life, Sage, London
- Anon, Conceptual Model of Soft Systems Methodology. Available: www.emeraldinsight.com/fig/0600090103001.png [2010, 9th March].
- Anon , Concise Oxford English Dictionary. Available: <a href="https://www.askoxford.com/dictionaries/?view=uk">www.askoxford.com/dictionaries/?view=uk</a> [2010, March].
- Anon , *Prince " Overview* [Homepage of Office of Government Commerce], [Online]. Available: <a href="www.ogc.gov.uk/methods">www.ogc.gov.uk/methods</a> prince 2.asp [2006, 28th December].
- Anon, *Prince 2 Benefits* [Homepage of Office of Government Commerce], [Online]. Available: <a href="http://www.ogc.gov.uk/methods-prince-2-benefits.asp">http://www.ogc.gov.uk/methods-prince-2-benefits.asp</a> [2009, 14th August].
- Anon, Various Prince 2 Methodology [Homepage of Silicon Beach Training], [Online]. Available: http://www.prince2-training-uk.co.uk [2009, 14th August].
- Ashforth, B. & Gibbs, B. 1990, "The Double-Edge of Organisational Legitimation", *Organization Science*, vol. 1, no. 2, pp. 177 194.

- BBC4, The Beauty of Diagrams, viewed 25<sup>th</sup> April 2011 via www.bbc.co.uk)
- Bernstein, J.M. 1995, *Recovering Ethical Life Jurgen Habermas and the future of Critical Theory,* First edn, Routledge, London & New York.
- Blackburn, S. *The Project Manager and the Project-Network*, Henley Management College, England.
- Bloor, D 1999, "Anti Latour" Studies in History and Philosophy of Science, 30(1): 81-112
- Bowen, K. 1998, "Some thoughts on Multimethodology", *Systemic Practice and Action Research*, vol. 11, pp. 169-177.
- Brown, S.D. 2002, "Theory, Culture & Society", vol. 19, no. 3, pp. 1-27.
- Brunsson, N. 1982, "The Irrationality of Action and Action Rationality: Decisions, Ideologies and Organizational Actions", *Journal of Management Studies*, vol. 19, no. 1, pp. 29-44.
- Bryman, A. & Bell, E. 2007, *Business Research Methods*, second edn, Oxford University Press, Oxford, England.
- Callon, M. 1999, "Actor-network theory the market test" in *Actor Network Theory and after*, eds. J. Law & J. Hassard, Blackwell, Oxford, England, pp. 181-195.
- Carnall, C. 1995, Managing Change in Organisations, Second edn, Prentice Hall, London.
- Checkland, P. 2006, "Viewpoint: Reply to Eden and Ackermann: Any future for problem structuring methods?", *Journal of the Operational Research Society*, no. 57, pp. 769-771.
- Checkland, P. & Winter, M. 2006, "Process and Content: two ways of using SSM", *Journal of the Operational Research Society*, , no. 57, pp. 1435-1441.
- Checkland, P. 1981, Systems thinking, systems practice, Wiley, Chichester.
- Checkland, P. & Scholes, J. 1990, Soft systems methodology in action, Wiley, Chichester.
- Conway, S. & Steward, F. 2009, *Managing and Shaping Innovation*, Oxford University Press.
- Crozier, M. & Friedberg, E. 1977, *Actors and Systems The Politics of Collective Action,* The University of Chicago Press, Chicago and London.

- Daellenbach, H.G. & McNickle, D.C. 2005, *Management Science, decision making through systems thinking*, Palgrave Macmillan, Hampshire.
- DCI Scientific Support 2004, The Way Forward, Studyforce, United Kingdom.
- DCI Scientific Support 2004, *Single Site Project Board Briefing Document*, Studyforce, England.
- DCI Scientific Support 2001, A Unified Scientific Support Unit?, Studyforce, England.
- De Bono, E. 2000, Six Thinking Hats, Penguin Books, Great Britain.
- Deleuze, G. & Guattari, F. 2003, What is philosophy? Verso, London.
- Diener, E and Crandall, R 1978, *Ethics in social and behavioral Research*, Chicago, University of Chicago Press
- Dunbar, R.L.M., Dutton, J.M. & Torbert, W.R. 1982, "Crossing Mother: Ideological Constraints on Organizational Improvements", *Journal of Management Studies*, vol. 19, no. 1, pp. 91-108.
- Easterby-Smith, M., Thorpe, R. & Lowe, A. 2003, *Management research An Introduction,* 2nd edn, Sage, London.
- Eden, C. & Ackermann, F. 2006, "Viewpoint: Where next for Problem Structuring Methods", *Journal of the Operational Research Society*, vol. 57, no. 7, pp. 766-768.
- Flood, R.L. & Jackson, M.C. 1992, *Critical systems thinking : directed readings,* Wiley, Chichester.
- Gilbert, A. 1989, *Machiavelli-The chief works and others,* Duke University Press, Durham and London.
- Glaser, B & Strauss, A 1967, The discovery of grounded theory. Chicago: Aldine
- Graham, N. 2008, PRINCE2 for Dummies, John Wiley & Sons, Great Britain.
- Habermas, J. 1984, *The Theory of Communicative Action: Reason and Rationalisation of Society,* Heinemann, London.
- Habermas, J. & Luhmann, N. 1971, *Theorie der Gesellschaft oder Sozialtechnologie,* Suhrkamp, Frankfurt.
- Hacking, I. 1990, *The taming of chance*, Cambridge University Press, Cambridge.

- Harris, J 2005, *At-home ethnography: Struggling with closeness and closure* in Jones, C & Munro, R (Eds) Contemporary Organization Theory, Blackwell Publishing, Oxford.
- Heidegger, M. 1978, Basic Writings, Routledge, London.
- Henry, E.R.S. 1934, *Classification and uses of fingerprints,* Seventh edn, His Majesty's Stationery Office, London.
- HMIC 2004, Modernising the Police Service: A Thematic Inspection of Workforce Modernisation, HMIC, London.
- Hodgson, D. & Cicmil, S. 2006, *Making Projects Critical*, Palgrave Macmillan, Basingstoke and New York.
- Holdaway, S. 2003, *Police Race Relations in England and Wales: Theory, Policy, Practice,* Police & Society, 7, pp 49-75.
- Home Office 2005, *Science and Innovation Strategy 2005-2008*, TSO, London.
- Home Office 1997, Scientific Support Best Value Pilot Review, Home Office, London.
- Jackson, M C, "Toward Coherent Pluralism in Management Science", Journal of the Operational Research Society, 50 pp12-22
- Jacobs, B. 2009, "Developing performance management in a local strategic partnership:context and issues", *International Journal of Public Sector Management*, vol. 22, no. 5.
- Johnson, P. & Duberley, J. 2000, *Understanding management research : an introduction to epistemology,* Sage, London.
- Keys, P & Midgeley, G 2002, "The process of OR, Part Special Edition Editorial", *Journal of the Operational Research Society*, 53 pp123-125
- Knights, D. & Willmott, H. 1999, Management Lives: Power and Identity in Work Organisations, Sage, London.
- Knights, D. & Scarborough, H. 2007, Re-assembling the relevance argument in organisational and management research: Mode 2 and Actor Network Theory.
- Kotter, J.P. 1996, Leading Change, Harvard Business School Press, USA.
- Latour, B. 1987, *Science in Action: How to follow Scientists and Engineers Through Society,* Harvard University Press, Cambridge, Massachusetts.

- Latour, B. 1999, "On recalling ANT" in *Actor Network Theory and after*, eds. J. Law & J. Hassard, Blackwell, Oxford, England, pp. 15-25.
- Latour, B. 1999, *Pandora's hope, Essays on the reality of science studies,* Harvard University Press, Cambridge, Massachusetts.
- Latour, B. 1996, *Aramis or the love of technology,* Harvard University Press, United States of America.
- Latour, B. 1988, How to write 'The Prince' for machines as well as for machinations, Edinburgh University Press.
- Laurier, E & Philo, C 1998 "X-morphising: review essay of Bruno Latour's Aramis, or the love of technology" University of Glasgow
- Law, J. 1999, "After ANT: complexity, naming and topology" in *Actor Network Theory and after*, eds. J. Law & J. Hassard, Blackwell, Oxford, England, pp. 1-14.
- Lewin, K. 1951, Field Theory in Social Science, Harper and Row, New York.
- Lilley, S. 2001, "The language of Strategy" in *The Language of Organization*, eds. R. Westwood & S. Linstead, Sage, London., pp. 66.
- Linstead, S., Fulop, L., Lilley, S. 2004, *Management and organization : a critical text,* Palgrave Macmillan, Basingstoke.
- Lloyd, J. 1996, "Developing multi-skilled teams for effective service delivery", *Facilities*, vol. 14, no. 3/4, pp. 20.
- Loveday, B. 2005, Police Staff and Service Modernisation: A Reform Too Far?
- Luhmann, N. 1995, Social Systems.
- Machiavelli, N. 2004, The Prince, Penguin Books, London.
- Manning, P 1977, *Police work: The social organization of policing*, Cambridge, MA, MIT Press
- Marshall, J & Reason, P 1994, Adult learning in collaborative action research: Reflections on the supervision process, Studies in continuing education, Research and Scholarship in Adult Education, 15(2), pp117-132

- McClean, C and Hassard, J 2004, Symmetrical absence/symmetrical absurdity: Critical notes on the production of Actor-Network accounts, *Journal of Management Studies*, 14(3): 493-519
- Metcalfe, B. & Dick, G. 2000, "Is the force still with you? Measuring police commitment", *Journal of Managerial Psychology*, vol. 15, no. 8.
- Mingers, J. & Rosenhead, J. 2004, "Problem Structuring Methods in Action", *The European Journal of Operational Research*, vol. 152, no. 3, pp. 530-554.
- Mingers, J. & Rosenhead, J. (Eds) 2001, Rational Analysis for a problematic world revisited, Wiley, Chichester.
- Mingers, J. & Taylor, S. 1992, "The use of Soft Systems in Practice", *The Journal of the Operational Research Society*, vol. 43, no. 4, pp. 321-332.
- Mingers, J 2005, "More dangerous Than an Unanswered Question is an Unquestioned Answer": A contribution to the Ulrich Debate. Viewpoint, *Journal of The Operational Research Society*, 56, pp 468-474.
- Nietzsche, F. 2009, *Genealogy of Morals*, Richer Resources Publications, Arlington, Virginia, USA.
- OGC 2005, Managing Successful Projects with PRINCE2, The Stationery Office, London.
- Optner, S.L. 1965, *Systems Analysis for Business and Industrial Problem-Solving,* Prentice-Hall, Englewood Cliffs.
- Patching, D. 1990, Practical Soft Systems Analysis, Pitman Publishing, London.
- Petkov, D., Petkova, O., Andrew, T. & Nepal, T. 2008, "On the process of combining soft systems methodologies and other approaches in systemic interventions.", *Journal of Organisational Transformation and Social Change*, vol. 5, no. 3, pp. 291-303.
- Project Support 1999, *Managing Change: Project Management Guide*, Studyforce, United Kingdom.
- Pugh, D S, 1983, "Studying Organizational Structure and Process" in G Morgan (Ed), Beyond Method, Newbury Park, Calif: Sage
- Reiner, R 2010, New Theories of policing: a social democratic critique, in Downes, D and Hobbs, R and Newburn, T (Eds) The eternal recurrence of crime and control: essays for Paul Rock, Oxford University Press pp 141-182

- Schon, D.A. 1983, *The Reflective Practitioner; How Professionals Think in Action,* Basic Books, USA.
- Scientific Support, I. 1998, A Unified Scientific Support Unit?, Studyforce, England.
- Sewchurran, K. & Barron, M. 2008, "An Investigation into Successfully Managing and Sustaining the Project Sponsor Project Manager Relationship Using Soft Systems Methodology", *Project Management Journal*, vol. 39.
- Somekh, B. & Lewin, C. 2004, *Research Methods in Social Sciences*, Sage Publications, United Kingdom.
- South Wales Police, Comparison of inked and recovered fingerprints [Homepage of South Wales Police], [Online]. Available: <a href="www.south-wales.police.uk/fe/master.asp?n1=8&n2=253&n3=1028">www.south-wales.police.uk/fe/master.asp?n1=8&n2=253&n3=1028</a> [2009, 5th July].
- Stacey, R.D. 2003, Strategic management and organisational dynamics: the challenge of complexity, 4th edn, FT/Prentice Hall, Harlow.
- Stowell, F.A., West, D. & Howell, J.G. 1993, *Systems science : addressing global issues,* Plenum Press, New York.
- Studyforce 2004, Scientific Support Away Day Minutes, Studyforce, England.
- Studyforce 2004, Crime Support Policing Plan, Studyforce, England.
- Summa, H. 1992, "The Rhetoric of Efficiency: Applied Social Science as Depoliticization" in *Writing the Social Text: Poetics and Politics in Social Science Discourse*, ed. R.H. Brown, Aldine de Gruyter, New York, pp. 135-153.
- Sykes, C and Treleaven, L 2009, *Critical Action Research and organizational ethnography* in Ybema et al (Ed) Organizational Ethnography, Studying the Complexities of Everyday Life, Sage, London
- Toennesen, C. "Lost in Translation? Actor-Network Theory and Organisation Studies", .
- Townley, L. & Ede, R. 2003, *Forensic Practice in Criminal Cases,* The Law Society, United Kingdom.
- Uden, J.v. 2004, Organisation and complexity, Utrecht University of Humanities, Utrecht.
- Van der Waal, K 2009, Getting going: Organising ethnographic fieldwork in Ybema et al (Ed) Organizational Ethnography, Studying the Complexities of Everyday Life, Sage, London

- Van Maanen, J 1995 "An end to innocence: The ethnography of ethnography", in J.Van Maanen (Ed), Representation in ethnography. Thousand Oaks, Sage pp1-35
- Wang, M. & Smith, G.W. 1988, "Modelling CMI Systems; Part 1: methodologies", *Computer-integrated Manufacturing Systems*, vol. 1, no. 1, pp. 13-187.
- White, P. 1998, *Crime Scene to Court, The Essentials of Forensic Science,* The Royal Society of Chemistry, United Kingdom.
- Whittle, A. & Spicer, A. 2008, "Is Actor Network Theory Critique?", *Organization Studies*, vol. 29, no. 4, pp. 611.
- Winner, L. 1977, Autonomous technology: Technics out of control as a theme for political thought. The MIT Press, Cambridge.
- Ybema (Ed), 2009, Organizational Ethnography; Studying the complexities of everyday life, Sage, London.
- Ybema, S & Hughes, M 2009, Making the familiar strange: A case for disengaged organizational ethnography in Ybema et al (Ed) Organizational Ethnography, Studying the Complexities of Everyday Life, Sage, London
- Young, M 1991, An inside Job: Policing and police culture in Britain, Oxford, Clarendon