# "If It's Not a Case, It's Not a Problem"

- A study of resource allocation within the Norwegian Police

Åge Dyrøy



**MASTER OF POLICE SCIENCE 2010** 

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 1 Contents

2	Pre	Preface4				
3	Sur	Summary				
4 Introduction						
5	The	subj	ect of this research	8		
	5.1	Wh	y is this research worth doing?	9		
	5.2	The	The problem statement; defining its' concepts and framework			
	5.2	.1	1 Risk management			
	5.2	.2	Resource allocation	12		
	5.2	.3	Main goals of the Norwegian Police	13		
	5.3	The	limitations of this project	14		
6	Lite	eratur	e review	15		
	6.1	Risk	management in Norwegian governmental sector	15		
	6.2	Risk	-management within the Norwegian Police	19		
	6.2.1		Problem-oriented policing	21		
	6.2	.2	Intelligence-led policing	<b>2</b> 3		
	6.3	Res	ource allocation and the role of strategy	24		
	6.4	Res	ource allocation and the analytical framework	26		
	6.5	The	decision	27		
7	Me	Methodology				
	7.1	Theory, hypothesis and empirical research		30		
	7.2	The	selection of research area and informants	32		
	7.3	The research design of this project				
	7.4	Analyzing the data		36		
	7.5 Considerations regarding reliability and validity		siderations regarding reliability and validity	37		
	7.5	.1	External and internal consistency	38		
	7.6	Ethi	cal reflections	39		
8	Fin	Findings				
	8.1	The	desire to <i>prevent</i> crime	41		
	8.2	Exc	elling at emergencies	41		
	8.3 Contingency		tingency	43		
	8.4	Per	formance indicators	45		

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

	8.4.	1	Reactive efforts	. 48		
	8.4.	2	Fragmented efforts	. 50		
	8.4.	3	Performance indicators as basis for orientation and decisions	. 51		
	8.5	Ider	ntified problem-driven resource allocation	. 54		
	8.5.	1	Problem-oriented Policing	. 57		
	8.6	Res	ource accountability	. 60		
9	Disc	cussic	on	. 63		
	9.1	Perf	formance indicators as an organizational concept	. 63		
9.2 Bringing strategy to life?		Brin	ging strategy to life?	. 65		
	9.2.1		The perception of strategy	. 65		
	9.2.2		Criminal procedure – "If it's not a case, it's not a problem"	. 68		
	9.3	The	process of identification	. 73		
	9.4	Prio	ritizing – a contradicting exercise?	. 77		
	9.5	Sub	stituting means for ends	. 79		
	9.6	Kee	ping up with resource accountability	. 81		
	9.7	"A g	good decision is based on knowledge and not on numbers"	. 83		
1(	) Con	clusi	on	. 89		
11	L App	endi	x A – interviews with practitioners	. 97		
12	2 Appendix B – interviews with mid-level police managers					

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

2 Preface

This master thesis came to as a result of a field research in four different police stations in

Norway during the period April – May 2010. I wish to thank the informants for indulging me

with my questions and for the extraordinary hospitality displayed by every person I came into

contact with during the survey.

A BIG "thank you" also goes to Maren Eline Kleiven at the Norwegian Police University

College for invaluable supervision in the process of constructing this thesis, as well as being

endlessly patient and a crucial motivator!

I also wish to thank my employer throughout the period completing this master, Hordaland

police district, in particular for all the types of support being given me during this time.

I have read several written assignments where the introduction starts off with thanks to spouse

and children – now I know why!

I would under no circumstances have been able to complete this work without the endless

efforts and patience of my Monica and our lovely son!

So, here it is – thank you!

4/98

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 3 Summary

This thesis focuses on identifying the structural mechanisms within the Norwegian Police which determine how investigative and patrolling resources are being allocated. The research conducted in connection to this indicates that the police in Norway delivers work of high standards on a tactical, reactive level, but fails to work in a strategic manner. The resource allocation has been examined on the backgrounds of the strategies decided upon by the top-management within the Norwegian Police; intelligence-led and problem-oriented policing.

Findings suggest that converting this strategy into the daily work of the organization is obstructed by an autonomous inclination towards criminal procedure, leading to a consistently reactive activity pattern. The survey identified some elements of risk treatment, particularly in connection to patrol duty. However, these elements existed on a local and isolated level, not being integrated into a holistic risk management framework which could not be identified in the organization.

Also, there seem to be a lack of cost-benefit assessments as financial costs relating to individual criminal cases are not the focus of the organization. At the same time the survey indicated that costs relating to criminal procedure are accelerating, seemingly without management having the ability to affect this development.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 4 Introduction

This master thesis was a result of personal reflections by the author; how can society be sure that police resources directed at fighting crime are done so in the most efficient manner possible? By observing several criminal cases over the years involving trafficking of both narcotics and humans, it became evident that convictions and the number of prison-years each case produced were the yardsticks the involved police officers applied when assessing the "victories". These cases consumed an alarmingly large portion of both funding and human resources available to the investigative departments in questioned, but no reflections concerning the use of these resources were noticeable.

Naturally, there are several prudent reasons for not applying any cost-benefit assessment to certain cases; they involve vulnerable victims with the need for protection and vindication. However, it seems as there is a general absence of thorough considerations concerning resource allocation within the Norwegian Police; costs related to investigation of criminal cases have increased, simultaneously with a growing demand for efficiency within the Police.

In 2010 an operational analysis of the Norwegian Police was published. It stated amongst several things that penal expenditures have vastly increased and they were likely to continue this development. Particularly the purchase of various services connected to criminal cases (interpreters, different analysis) have risen dramatically (Politidirektoratet [The Norwegian Police Directorate], 2010a, p. 14). This trend is confirmed by the National Bureau for Statistics (SSB) which in 2010 identified an 8% increase in the total budget and an increase in police manpower of 14% from 2005 to 2009, although the population increased proportionally resulting in little or no change in the ratio "police per citizen".

It was also identified that fewer persons were kept in police custody pending investigation, but the ones who did were held for a *longer* period of time (SSB 2010). The main reason for this was narcotics offences. The costs for such custody are the responsibility of the police. As a backdrop to this information the average clearance rate in Norway in 2010 was 37,4%, Oslo with approximately 586 000 citizens (12% of the Norwegian population) achieved a clearance rate of 23,7 (Politidirektoratet [*The Norwegian Police Directorate*], 2010c), and the population is estimated to increase by 13,5% towards 2020 (Politidirektoratet [*The Norwegian Police Directorate*], 2008).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

A statement which sums this up in a direct manner is found in the book "Intelligence-Led Policing" (2008) by Jerry Ratcliffe; "You can't arrest your way out of a problem" (p.2). If that is what the Norwegian police are trying, then can the use of existing resources be closer scrutinized?

#### 5 The subject of this research

This section will outline which areas this research will examine, as well as its limits. It will briefly deal with the different reasons for examining the problem statement, and what possible benefits might be derived from this project.

Over the recent years risk-management has developed into a discipline of its own. It has been decided both politically and within the police organization that Norwegian police should utilize principles within risk-management in order to maximize the use of its resources and to better achieve its goals (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008). The latter refers to resource allocation which will be defined later on. It is the aim of this project to identify the impact (or lack of) risk-management strategies have on existing resources and what assessments lies behind.

Cost-benefit assessments are meant to give decision-makers information which they can act upon. Factors which are emphasized in such assessments are an estimation of the costs of any given measure and expected benefits or loss. The method structures advantages and disadvantages of different solutions (Aven, Boyesen, Njå, Olsen, & Sandve, 2008, p. 169). Even though the method in itself revolves around monetary values, properties such as human lives, quality of life, compliant to regulations and so on, can be added to the assessment. Within the context of the police such assessments can be conducted in numerous ways, either in costs of investigatory means or materialistic value (Ratcliffe, 2008, p. 202). This discipline are closely connected with evaluation, although this has from time to time been an neglected and misunderstood discipline within the Norwegian Police; focus has been evaluating means rather than impact, and sources have been unilateral (Gundhus, 2009, p. 279).

Management of human resources when dealing with crime can be performed according to several different criteria based on, amongst others, cost-benefits assessment as described above. The police do not have endless resources, and it is set forth as a requirement that the ones available are utilized in a pertinent manner. This requirement derives from the necessity of planning, and strategic analysis can assist the police in maximizing its resources (Politidirektoratet [The Norwegian Police Directorate], 2007b, p. 10). It is the aim of this project to identify mechanisms or criteria which affect the situation of human resources within the field of research in questioned.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 5.1 Why is this research worth doing?

In order to look in to these topics, formulating a hypothesis or a problem statement is an invaluable tool to limit the project and act as a guide when identifying relevant findings, and where they belong in the project. In this respect Grønmo outlines four objectives in the process of constructing this tool (Grønmo, 2007, p. 72). Elaborating on these objectives sums up why this research is worth doing.

Identifying an area or research is the process of conveying the reasons for why this particular topic motivates the researcher to investigate it. Several scholars and researchers have looked into how the police apply their resources (Finstad 2000, Gundhus 2010, "Driftsanalysen"/POD 2010).

However, this project seeks out to comment on the relationship between the objectives of the government in allocating resources within the police, and how the employees at the executing level actually perceive and experience it. The choice of this particular level is made on the assumption that it is here the very inception of turning strategy into action resides.

The identification of this particular research area came to in observing the absence of any assessments within the police as to what effort to apply to any given problem, and why the particular approach was chosen in contradiction to other possible efforts and approaches. This led to a preliminary hypothesis that there are both formal criteria and organizational mechanisms deriving from them which have crucial, and perhaps inadvertently damaging, impact on how the police apply its resources.

When justifying the problem statement a key question is what any findings might contribute to. A guiding principle of the Norwegian Police is that it should at any time maximize its use of available resources (Balchen, 2004, p. 6). It could be assumed that identifying pitfalls of the process of resource allocation within the police, might lead to an enhanced awareness regarding assessments as to how resources are utilized. Furthermore, it might increase focus on the alignment between resource allocation and the main goals of the organization. Finally, it might also contribute to counteract any unproductive autonomous mechanisms residing in the organization; "we don't know why, but we've been doing it for years".

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 5.2 The problem statement; defining its' concepts and framework

On the background of the presented theory this paper will therefore examine the following twofold problem statement:

- 1. Which organizational mechanisms and criteria do the employees experience determine the resource allocation of investigative and patrol resources against crime, at a local level within the Norwegian Police?
- 2. To what extent do the employees experience that the resource allocation they describe serves the main goals of the organization?

This problem statement implies some key concepts that will be discussed and defined below. These concepts need to be operationalized in order to develop the necessary tools to conduct the research (Grønmo, 2007, p. 74). This will also define this project's angle of approach. This paper will therefore look into the following questions:

What is the relationship between used funding within the Norwegian police, and the main goals of the organization? Factors that will be examined in connection with this are *financial resources* correlated to clearance rates, in order to achieve an understanding of the cost efficiency in the investigative process.

What is the relationship between the overall resource allocation within Norwegian police, and the main goals of the organization? This question will try to identify which factors affect the use and distribution of resources within the organization, and its possible consequences. Particular focus will be on the employee's perception and experience of how resources are allocated in contrast to what the intentions are, thus trying to identify inconsistencies.

How do the employees within the police organization view the current crime-fighting strategies applied by their employer in respect to their assigned work tasks? This question includes whether or not the employees perceive the applied strategies as effective, and also what lies behind their opinions on this matter.

The guides for the interviews are submitted as appendixes to this paper, and they will further elaborate on these questions.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 5.2.1 Risk management

This discipline acts as the overall framework where resource allocation is one of the objectives by managing risk; if risk can be identified and treated, gain can be maximized for the least amount of resources (Aven, 2007). Denying ships containing tons of crude oil access to the inner Norwegian coast line can be an effective risk treatment and use of resources, as oppose to cleaning up beaches after a shipwreck.

The Norwegian Police Directorate has set forth that the use of resources are to be utilized in a cost-efficient manner within the frame of risk-management (Politidirektoratet [The Norwegian Police Directorate], 2010f, p. 8). Risk management is defined in many ways depending on which field of expertise is in question, but its main objective remains: planning to minimize loss and optimize gain using the least amount of resources (Aven, et al., 2008, p. 47). In the financial world loss and gain are measured in monetary value, while in for instance a welfare context it might be reducing the number of fatalities due to certain diseases. The different aspects of risk and governmental risk management will be further elaborated upon in chapter 6.

In this project the concept of *risk* is as follows: "The likelihood of an event occurring and the uncertainty of which consequences the event might lead to" (Aven, 2007). This definition also coincides with the current definition of risk management applied in Norwegian public sector (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008).

As far as risk management is concerned, this discipline could therefore be perceived as "all measures and activities being conducted in order to affect risk" (Aven, 2007). In this context an assessments of ends versus means is called for in order to ensure relevant ends to desired means.

Aven (2003) presents 5 strategies of dealing with risk: risk removal, risk reduction, optimize risk, risk transfer and keep risk. The measures decided upon in going along with any of these strategies, must be subject to a cost-benefit assessment in order to possibly foresee whether they entail the desired outcome (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008, p. 41).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 5.2.2 Resource allocation

The concept of resource allocation derives from subject of economics. It falls under the discipline of resource management, but this exact concept adds some specific elements. First it is concerned with how the effect of a resource is *exploited*. Which factors are relevant in order to maximize the use of a resource? Second, exploitation implies that the resource is limited in supply, and that is the reason as to why its effect must be maximized.

Thus, the definition of the concept which will be applied in the context of this thesis is "the assessment of the effects of exploiting a limited resource" (Oxford Dictionary of Geography, 2004). In this thesis, resources reflect both human resources and funding.

The concept also plays a vital part in developing strategies, as decisions must be made concerning "with what resources shall we reach our goals?" (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 16). Its relation to risk-management as a discipline is also expressed: "the choice of measures and activities are to be made on the backgrounds of cost-benefit assessments" (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008, p. 7). The socioeconomic aspects of managing resources on behalf of the common wealth, is further elaborated on in a governmental report concerning socio-economic efficiency, on the backgrounds of the Pareto-criteria – the distribution of welfare resources:

"In order for the use of the society's resources to be as efficient as possible, the following three criteria need to be met:

- Efficiency in production
- Efficiency in consumption
- Efficient combination of production and consumption

By efficiency in the production, means that it should not be used more efforts than strictly necessary in order to produce a certain amount of goods and services. If it is possible to increase production of goods and services only by redistribute the resources, then they are not utilized efficiently.

The 'Pareto-criteria' can therefore be summed up as a requirement to not waste any resources, i.e. a requirement for socio-economic efficient use of resources. On any given basis of resources there are a

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

set of Pareto-optimal resource allocations, which will differ in its distribution profiles." (Norsk Offentlig Utredning [Norwegian Public Audits], 2000, p. 28)

.

Particularly the principle which states that resources are not efficiently used if production might be increased by their redistribution constitutes a vital part of the basis for this thesis.

Key elements regarding the exploitation of a limited resource in this thesis will therefore be how a resource is positioned in the organization, what assessments leads to the decision whether or not to redistribute resources and which structures exist in doing so or identify the lack of it.

Finally, the cost efficient approach set forth by The Norwegian Police Directorate derives directly from the directions and descriptions given by the National Center for Financial Management (Politidirektoratet [The Norwegian Police Directorate], 2010f, p. 8).

#### 5.2.3 Main goals of the Norwegian Police

In order to assess whether the exploitation of a resource is efficient or not, it is necessary to define what aims one is trying to achieve. There are several sources stating what the main goals of the Norwegian Police are. It should be pointed out that the police in Norway also have the responsibility for tasks not related to crime, such as issuing passport and administering claims concerning personal debts. Nevertheless, there are two goals in particular which are consistently put first in the various documents; crime prevention and increased safety (Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police], 2004-2005; Politidirektoratet [The Norwegian Police Directorate], 2010e).

It is evident that one of these goals engulfs the other; preventing criminal activities are a somewhat narrow segment of society considering all the aspects it consists of. Increasing *safety* however, is a whole different matter which, besides dealing with crime, affects such a variety of societal tasks that when reflected upon seems like an impossible undertaking. One of these tasks which are emphasized by government in relations to safety, are the police as an

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

emergency organization; knowing that whether it is a criminal matter or a cat in a tree, the readiness of the police is unquestionable (Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police], 2004-2005, p. 71).

Thus, the concept of main goals of the Norwegian Police which resource allocation will be examined upon in this thesis, constitutes the aspects which deals with efforts made against crime, as opposed to for instance the assigned task of leading rescue operations.

#### 5.3 The limitations of this project

This project will not focus on other police resources than investigative and patrolling manpower, as these constitute the bulk of the organization available everyday to the public in respect to police efforts against crime.

Part from the expert interviews, top-level managers such as police commissioners and the Police Director are excluded from this research on the grounds of how the problem statement sets out to identify factors affecting resource allocation at the *executing* level.

While interviewing informants it became rapidly evident that factors concerning *work culture* also were mentioned. As an illustration of this, a few informants gave statements indicating that both a biased system of advancement rewarding personal relationships and an occasionally autonomous work culture led by "alfa-individuals" instead of the formal managers were impediments for maximizing the use of resources.

Therefore the project is limited to identifying criteria and mechanisms embedded in the structure of the organization which are affecting the allocation of resources. Nor will it deal with issues concerning the organizational structure of for instance the police district in question.

Finally, this project will address the concept of resource allocation in connection with crime-fighting efforts in the context of the police organization. The project will not examine other crime-fighting resource allocations elsewhere in society.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 6 Literature review

In the following section some of the existing literature which have been deemed relevant to the discipline of resource allocation as performed in the Norwegian Police today, will be presented. The specific subject of resource allocation within policing is primarily mentioned as a factor which derives from risk-management in Norwegian Public sector (Politidirektoratet [The Norwegian Police Directorate], 2010f; Senter for Statlig Økonomistyring [National Center for Financial Management], 2008).

It seems as the discipline of resource allocation in itself in a larger degree is connected to the field of economics; the effects of exploiting a resource. There are some literature dealing with principles for resource management within the Norwegian Police which describes what the ideal situation should be; efficiency, evidence-based and so on. However, less literature are to be found concerning what actually affects the resource allocation in the Norwegian Police at the final and crucial stage; the executing level.

#### 6.1 Risk management in Norwegian governmental sector

The exploitation of public resources are to be assessed and performed within the frames of risk management (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008). Risk management is a discipline which derives from primarily the field of economics where risk is seen as a direct implication to whether or not a potential earning can take place. Some scholars claim that modern notions of risk has parted with the traditional perception of risk being a physical danger; instead of surroundings posing a threat to humans, it is now the surroundings which are threatened by risk (Kemshall, 2003, p. 9). System failures, break-downs in the economy, events in any given country with global consequences due to extensive international trading, are just some examples of this. The fear of such farreaching consequences has spurred the notion of managing risk into other fields of society; one does not have to sit and wait for costly damage to happen, there are ways of using resources to affect risk and minimize its impact.

Risk is defined by several different scholars in a variety of manners. Beck and Giddens have emphasized that risk "is transformed from a probabilistic, calculable artifact, to risk as

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

uncertainty, plagued by indeterminate knowledge and subject to a number of 'it depends' ... leaving the individual in a constant state of reflexivity' (Kemshall, 2003).

In terms of the "risk society", one of the most common definitions of risk in the modern world is set forth by Ulrich Beck, stating that risk is a "systematic way of dealing with hazards and insecurities induced and introduced by modernization itself" (Denney, 2005). The definition puts risk into a certain setting, indicating that the concept differs depending on who regards it.

This is important as it will later on in this thesis be focused on the police as risk communicators (Ericson & Haggerty, 1997); what preoccupies the police does not always coincide with the surroundings. As such, risk management can be seen as a continuous systematic process, and in the context of an organization it needs to be integrated in order to function as intended (Eide & Nagell-Erichsen, 2007).

Risk management in Norwegian public sector emphasizes that the main objectives of the discipline is to identify potential threats to the performance of any given government body and that any activity is subject to a cost-benefit assessment (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008, p. 7). This expresses the political intention of implementing a strategy which might reduce or optimize risk in order to utilize limited societal resources in the best possible way (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 7).

This principle is also anchored in the legislation. The "Regulation for Government Fiscal Management" states that:

"...governmental resources are to be applied with efficiency", "see to that determined goals and performance requirements are achieved, efficient use of resources and that the enterprise is managed in accordance with current legislation, including administrative best practice, unbiased and ethical conduct", and finally "ensure sufficient executive information and adequate basis for decision" (Senter for Statlig Økonomistyring [National Center for Financial Management], 2008).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

To illustrate the process behind these requirements a working model sets forth in which ways risk reducing techniques and resource allocation can be performed, as shown in table 1:

#### ENVIRONMENT FOR MANAGEMENT AND CONTROL

**Step 1:** Strategy for integrating risk management in the performance- and result management.

**Step 2:** The actual process of risk management integrated in the performance-and result management.

Step 3: Identify goals.

Step 4: Identify critical factors for success.

Step 5: Identify risks.

Step 6: Risk assessment and priority.

Step 7: Measures and control activities consequential to the assessments.

Step 8: Monitor risks.



#### Information & Communication

Step 3-8 are to be performed on both levels of local enterprises and lower, including operational processes and projects.

Table 1: Model for dealing with risk within performance- and result management (Source: Senter for Statlig Økonomistyring)

One of the things which are noteworthy by this model is the fourth step; Identify critical factors for success. This introduces an opening in the model, where counterproductive mechanisms in the organization might be discovered and dealt with. However, this implies that the actual outline of this specific model is consistent with the structure of the organization it is applied within. As illustrated in figure 1 step 3-8 in the model are to be performed continuously at any level. As step four invites the members of the organization to focus on any factor, mechanism or routine that might be damaging to the outcome of used resources, the question remains whether the organizational structure allows such identification based on the distribution of power within the enterprise:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

"Here we confront the central paradox of power the power of an agency increases in principle by that agency's delegating authority; the delegation of authority proceeds by rules; rules necessarily entail discretion and discretion potentially empowers delegates ... as Barnes (1988:103) puts it, such agencies 'must recognize that the output of appropriate action that they produce is what minimizes the input of coercion and sanctioning which they receive'. (Clegg, 1998, p. 41)

Clegg continues in illustrating that "this is what couples power/knowledge in Foucault's (1977) formulation ... power positions the subject through the organizations of disciplinary practices" (Clegg, 1998, p. 42).

In other words, while step four, "Identifying critical factors for success", being perhaps the key in order to successfully perform risk management and resource allocation; if the power within the organization lies in the delegation of authority and development of rules and routines, this might counteract the identification of factors which might have to be altered in order to consider the critical factors for success. The organization might end up chasing its tail; the critical factors for success are likely to be identified as any mechanism or routine within the organization, which constitutes someone's power or influence. Consequently, step four might end up not having the necessary impact which the model needs in order to yield any results.

Furthermore, fulfilling these requirements and affecting the process leading towards them, is not necessarily an integrated discipline within different government bodies. Several enterprises are identified in conducting *risk assessments* concerning mapping out potential threats to their performance, but with lacking the capacity to *act* upon these assessments:

"A few of the enterprises we know of perform risk assessments as a basis for developing strategies, new goals and performance indicators. The risk management is therefore connected to the daily operations of the enterprise, and ends up as a tool for enhancing internal control"

"Risk management is used far too little as a tool for making priorities. The analysis of critical factors for success and risks are not applied as a basis for prioritization, and allocation of resources towards the areas and activities which will have the greatest effect on the enterprise total achievement". (Eide & Nagell-Erichsen, 2007)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

One conceivable reason for this might be the contradiction which is embedded in applying risk management as a managerial strategy; the very strategy which sets forth to optimize and in some cases increase capacity due to improved resource efficiency, requires on its own dedicated resources in order to be integrated and fully functional within the organization (Andreassen & Gobel, 2006).

This implies that using the strategy parallel to the organization might be considered another "task" which requires resources instead of being the method of approach applied on solving assigned tasks. This perception of another element "stealing" resources might be enhanced through performance indicators not rewarding risk managerial strategies (Hammerich, 2007).

#### 6.2 Risk-management within the Norwegian Police

As elaborated on in section 5.2.1, The Norwegian Police Directorate emphasizes the use of resources in a cost-efficient manner within the frame of risk-management (Politidirektoratet [The Norwegian Police Directorate], 2010f, p. 8). In search of how the Norwegian Police perceives the concept of risk, the document which contains any definitions in a manner applying for the whole organization, is a published strategy by the Norwegian Police Directorate which title is approximately translated as "Managing local police enterprises". Definitions set forth in this document states that risk is:

"...conditions or events which might occur and affect the achievement of determined goals. A risk is to be assessed in relation to the likelihood it will occur, and the expected consequence. The result of such an assessment determines how high each risk is. Management is to decide which risk to prioritize according to which of them might damage achievement of vital goals the most". (Politidirektoratet [The Norwegian Police Directorate], 2010f, p. 5)

Furthermore, management is to ensure that the use of resources is cost efficient, and that:

"The enterprises will develop further on intelligence-led management as the main method in such manner that planning and decision-making are based on an evidence oriented and reflected approach, where analysis of risk and materiality are involved as key elements." (ibid. p.11)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The essence of the many requirements conveyed in this document to the police districts, can be expressed through the concepts of cost efficient use of resources, intelligence-led management and priority of risk according to the degree of harm inflicted on main goals. It should also be noted that this approach is a direct continuation of the model for risk management in Norwegian public sector presented earlier.

All of these elements are consistent with principles embodied in the "New Public Management" which emerged internationally during the 1980's, calling for more efficiency in the police sector, resource accountability and enhanced cost-benefit assessments (Christopher & Cope, 2009, p. 237; Kemshall, 2003, p. 119). This movement also made its impact on the Norwegian Police as Gundhus illustrates in how the expanding use of information technology within the police has been propelled by the demand for accountability and measuring performance (Gundhus, 2009, p. 18).

New Public Management spurred a notion of crime being managed, as opposed to police being overwhelmed by the number of cases. Gradually coinciding with how the risk infused society several concepts and perspectives appeared, especially individualized risk and actuarial justice where the "management of bads" came into focus (Gundhus, 2009; Kemshall, 2003). These perspectives entailed tolerating levels of crime through risk management where the efficiency of the system is the central tenet.

Ratcliffe (2008) makes an interesting observation regarding this orientation. As a response to the new demands the police adopted a more crime management approach. The most visible result of this was the emergence of crime desks which performed assessments of each case to better determine whether further measures should be taken or not. However, the implementation of such functions meant in reality just an added level of bureaucracy competing with other parts of the organization for even more scarce resources, affecting cooperation in a negative manner (Manning, 2005).

Furthermore, the crime management approach was to be combined with the introduction of the modern concept of risk into the police, leading to an interesting observation in relation to criminal procedure; it seems to expand further than the concept of crime. This point is illustrated by Ericson & Haggerty which state that "In risk society the traditional police focus

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

on deviance, control and order is displaced in favour of a focus on risk, surveillance and security" (Ericson & Haggerty, 1997, p. 18).

The first refers to the more traditional responses to crime applying investigation, arrest and incarceration as some of the main tools. Focusing on security, however, is trying to affect the situation where deviance occurs in the first place, as for instance private policing is a result from (Newburn, 2008). The demand from the public does not concern retribution, but rather safety of whatever situation they are in. This has also changed the expectations to the police as the public no longer assumes the organization is able to cope with the number of cases pouring in (Ratcliffe, 2008).

It is reasonable to assume that organizational structure affects the manner in which resources are controlled. This then, could pose a problem if the structure and management of the police are set on "deviance, control and order", while strategies and the field of expertise exert pressure in shifting focus to "risk, surveillance and security". Golding & Savage debate whether the mandate of the police is even possible to manage given the organization's inherently reactive nature. The very core of police work is responding to unpredictable events as opposed to other organizations which has defined long-term tasks and goals (Golding & Savage, 2008).

The following sections will deal with two models which are set by both the political and professional management of the Norwegian Police to be the overall approach to policing in Norway. This might help illustrate this seemingly inconsistency in goals, strategies and resource allocation.

#### 6.2.1 Problem-oriented policing

The Norwegian Police Directorate determined in 2002 that Problem-oriented Policing were to be implemented as a vital part of the organization's strategy:

"The goal of the Police is to reduce crime and increase safety. The strategy for achieving this goal is to involve every employee within the Police in a holistic, crime prevention effort. Problem-oriented Policing are an essential part of this strategy. This does not mean that preventive measures, investigation and emergency efforts are less important. POP entails that crime is to be fought efficiently, and the use of resources must meet a set of requirements." (Politidirektoratet [The Norwegian Police Directorate], 2002)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

In the same document the method itself is defined as "a work method were police effort is based on a systematic use of a variety of information sources (mapping) in order to intervene into crime patterns (Torstensson & Wikstrøm 1995, s.64)."

Furthermore, it concludes that police efforts have a tendency of being initiated after an incident has occurred, trying to solve the case through criminal procedure instead of using resources to avoid such incidents in the first place. This emphasizes and supports the notion of a prominent reactive activity pattern. The method has been reaffirmed as an essential one in the strategy of the Norwegian Police in the period 2010-2015 (Politidirektoratet [The Norwegian Police Directorate], 2010e, p. 4). One of the aims of the method is resource efficiency, as Ratcliffe states: "The hope is that by attacking and resolving the underlying cause of an issue, the police can establish long-term solutions to problems, problems that plague communities and cause significant workload drains on the police department" (Ratcliffe, 2008, p. 71).

It has been argued that "modern policing", where POP is one variant of the concept, emerged from a crisis in legitimacy of the police due to, amongst several things, ineffectiveness of fighting crime through traditional crime-solving (Kemshall, 2003; Maguire, 2008). The question then arises as to what motives lies behind the implementing of POP as seen on the backgrounds of the rise of risk and actuarial justice; the transformation from individual crime to risk factors in crime patterns.

One of the criticisms of POP relates to the crisis of confidence from the public towards the police. The strategy might be an attempt to, intentionally or unintentionally, deflect attention away from the incapability of the police as a crime-fighter, and transforming it into a problem which only can be solved by placing responsibility onto the "problem-owner" and resources other than the ones of the police (Gundhus, 2009). This has also been referred to as a consequence of "governmentality"; as the government no longer is able to provide for the entire specter of safety demanded by the individual, the latter is made responsible for his or her own situation. Governmental control is instead sought through risk infused strategies of crime management (Denney, 2005).

When explaining why the method in some cases has not been successful, it has been focused on the fact that the closer to the bottom and executing level of the organization one gets, the

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

less control over the resources exists, if any at all; "This lack of resources, or a mechanism to ask for them, resulting from the shift of emphasis from management to the front line, is seen as 'structural difficulty' with problem-oriented policing" (Ratcliffe, 2008, p. 76).

Despite the fact that the implementation never has been evaluated, the use of problemoriented policing in Norway has been held out to be a successful preventive risk managing strategy within the Norwegian public sector (Senter for Statlig Økonomistyring [National Center for Financial Management], 2009). As far as increased efficiency in the use of resources, being one of the motives for implementing the work method, no literature has been found which can either support or falsify this being achieved.

#### 6.2.2 Intelligence-led policing

Intelligence-led policing is another method which the Norwegian Police have stated is a part of the overall strategy decided upon by the organization. It focuses on the use of processed intelligence products based on several sources, which constitutes a basis for qualified decisions (Mitchell, 2007, p. 76). The method is a strategic approach to managing crime which has its origins from several conceptual policing frameworks. The outlines of the method are identifying crime by the use of covert sources such as police surveillance, and open ones such as media and municipals, thereby analyzing the findings; what are the root causes (Ratcliffe, 2008). One of the benefits of this approach is that police resources can be allocated more rationally according to where the problems *actually* exist, rather than where the police *presume* they exist.

The Norwegian Police Directorate has conveyed in several publications that police efforts are to be based on knowledge, as for instance in the "National Strategy for Intelligence and Analysis". The strategy states that the main goal is to provide decision-makers with the best basis in regards to making priorities and developing strategies, outline activity plans which integrates risk-management, cooperate with external partners, plan for efficient use of resources, develop *preventive* strategies and finally assess and evaluate (Politidirektoratet [The Norwegian Police Directorate], 2007b).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Adopting ILP as a strategy means a slight alteration in the approach to crime than the one of POP, as the concept of intelligence is more proactive and seeks support from both *open* and *covert* sources and as such attempts to reduce the gap towards social science (Christopher & Cope, 2009, p. 236; Ratcliffe, 2008, p. 95). Where POP are more responsive to the problems of the public based on repeated incidents, ILP focuses on "resource allocation by knowing the business" (Flood & Gaspar, 2009, p. 53).

In relations to this strategy Ratcliffe particularly emphasizes what he refers to as the "DIKI-continuum" and the "3-i model" (Ratcliffe, 2008, pp. 96, 109), both of them held to be essential in maximizing the outcome of intelligence-led policing. The continuum refers to Data – Information – Knowledge – Intelligence, where the essentiality of the model is recognizing the transition leading up to intelligence which entails converting collected data into tangible actions. This focus might prevent that the collection of data becomes a goal in itself.

The "3-i model" seeks out to connect and drive forward the different aspects of intelligence-led policing. The name refers to interpret, impact and influence. This model differs from other intelligence models as it also considers the processes *between* the different stages; information are not only to be interpreted, but it must also be able to influence decision-makers in order to have an impact on crime. The combination of these two aspects is meant to increase the quality of decisions concerning prioritizing resources.

#### 6.3 Resource allocation and the role of strategy

When looking upon the contents of the concept strategy within Norwegian public sector it sets forth that: "Strategy is the enterprises' superior decisions on direction and undertakings which identifies changes to be given priority the next few years" (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 14).

As identified so far, the overall strategies of the Norwegian Police is that problem-oriented policing is to be an overall work method where *knowledge* is a key factor (Balchen, 2004). There are some factors worth noticing in developing and implementing a strategy into an

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

organization, which have the potential to interfere with another; the distinction between strategy, performance indicators and criteria for priority.

When implementing a new strategy into an organization, a part of the process is establishing performance indicators, for determining its progress, success or failure (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006). In principle a strategy is the basis for how an organization will utilize its resources, and therefore it is crucial having indicators providing information if an alteration is needed according to the determined goals. However, a crime analysis might make recommendations which are in accordance with strategies, but conflict with the performance indicators (Evans, 2009, p. 202). Such conflicts might be allocating resources from one area of crime to another.

This makes it all the more important to have established consensus concerning which criteria priorities are to be made that preserves the integrity of the organization's overall goals; prioritize according to indicators or for instance harm (Tusikov & Fahlman, 2009, p. 148)? Managers who see "performance information" as a synonym for "intelligence" are likely to choose according to where the control mechanisms are built in. Aligning the nexus strategy – performance – criteria of priority is therefore crucial in avoiding inadvertent damage to resource allocation (Gillespie, Sicard, & Gardner, 2007).

The term *strategic thinking* refers to a concept of long term management, although the definition of the content might differ concerning the process of how management is transformed into tactical dispositions and operations (Christopher & Cope, 2009, p. 236). Emphasizing the long term perspective is presumably vital in order to letting the strategy have its impact and to identify positive and negative factors relating to it over some period of time.

One obstacle relating to this at least in public sector is pointed out by The National Center for Financial Management. It has been observed that strategic thinking has suffered from the fact that planning has been kept (naturally) within each budget-year, which could prevent the desired long-term effects from strategy (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 16). The reason for this may be that performance indicators might form at least part of the basis for the distribution of funding.

#### 6.4 Resource allocation and the analytical framework

Strategies decided upon by the Norwegian Police call for a wide array of analytical skills and capacities in order for them to function (Ratcliffe, 2008, p. 76). This relates directly to step four in the model in table 1; identifying critical factors for success. This section will outline some arguments as to why this function is crucial to resource allocation.

The concept of strategic analysis within the Norwegian Police is defined to be "an aid and tool to, in a structured manner, identify, collect, process and present information, experiences and knowledge concerning the surroundings and internal affairs which are of importance for the development, choices and enforcement of strategy for present or future enterprises" (Politidirektoratet [The Norwegian Police Directorate], 2004, p. 10). Tusikov & Fahlman states regarding the purpose of threat and risk assessments that they are "intended to facilitate decision-making regarding the setting of priorities, planning and program requirements, strategy and policy developments, and resource allocation" (Tusikov & Fahlman, 2009, p. 148).

Traditionally the police have relied on statistics based on crime recorded by or reported to the police, when measuring or directing police efforts, although these numbers are greatly affected by legislation, police activity and the public's inclination to report crime (Innes, Fielding, & Cope, 2005, p. 50; Maguire, 2007). Manning holds out crime statistics to be a product of police activity, unable to provide any certain information concerning the extent of crime. He regards it to be impossible ever knowing the full extent of crime, particularly given its private nature (Manning, 2005). For this reason, and to facilitate the shift from information to knowledge according to intelligence-led policing, the need for processed, multi-sourced analysis came to in order to "fill out the blanks" (Cope, 2008).

One of these sources is public surveys which the British Crime Survey is one example of. In Norway the Norwegian Police Directorate has during the recent years conducted such surveys to measure confidence in the police, perception of safety, police-service satisfaction and crime-exposure compared to recorded crime (Politidirektoratet [The Norwegian Police Directorate], 2010d). Such surveys are a vital element in strategic thinking as it focuses not just on crime, but the quality of life in the context of conceptualized risk; as referred to earlier police risk-management involves more than crime.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Still, one of the criticisms of the BCS has been that it is more of an "opinion poll" rather than providing objective information (Maguire, 2007, p. 248), which might be a relevant argument in respect to the Norwegian counterpart. It has also been some objections that they do not necessarily express views specifically concerning *the police*, but public sector as a whole.

Creating "the full picture" and knowing the problems within the area of a police entity might spur a more relevant dialogue with government concerning the resources needed and justifying the resources spent (Christopher & Cope, 2009, p. 240). As such, when giving the DIKI-continuum as second glance on the backgrounds of these aspects, this approach implies the use of several sources where all of them need to be evaluated as to reliability (Ratcliffe, 2008, p. 128). This implies extensive knowledge and training in applying principles of research within social sciences to prevent what is produced and presented are merely a *description* of the information (Christopher & Cope, 2009, p. 243).

#### 6.5 The decision

In order to better understand the identified mechanisms for resource allocation, this section will briefly outline the formal structures of how the Norwegian Police are organized and managed, as well as possible challenges making decisions concerning resource allocation. By doing this the findings and other information in this thesis might be put in to context.

The political management, represented by the Department of Justice and Police (DJP), has the overall oversight and responsibility for all activities executed by any part of the organization. However, on the next level beneath the professional management splits in two; The Norwegian Police Directorate (POD) and the Norwegian Attorney General (NAG) (Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police], 2004-2005, p. 64).

POD has the responsibility for coordinating and keeping oversight of matters concerning the profession of policing, such as police tactics, development of strategies within analytical work and crime prevention, and international cooperation. As a directorate POD, naturally, is an integrated part of the police organization, situated between the DJP and the rest of the organization below.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

However, within the Norwegian Police the function of prosecution is an integrated part of the organization. This part of the organization is administered by the NAG which is given authority of instructing all matters relating to the processing of criminal cases. These instructions profoundly affect resource allocation as the main performance indicators of the organization lie within this area of expertise. Naturally, in order to maintain integrity of legislative procedures, such instructions cannot be ignored, for instance in a prioritizing process.

As such, the fields of expertise within the organization can be roughly divided into two areas; the emergency function of the organization which ensures capabilities concerning instant aid, and the function of criminal proceedings which is the gateway into the penal system. This is not much different from other law enforcement agencies in the world, perhaps with one exception; investigators and patrol officers in many cases have intersecting service rosters, and consequently also duties, with one another. This will be further elaborated on in chapter 8, "Findings".

This result in a system where the Norwegian Police is managed alongside two tracks which partially have different goals to consider; POD emphasizes proactive police efforts, while the Attorney General focuses on criminal procedures which implies reactive police efforts. The tension between these factors was also a vital contributor to the emergence of evidence-based policing and strategic intelligence (Christopher & Cope, 2009, p. 237).

A second dimension to this is tension between central and local priorities which often differs (Golding & Savage, 2008, p. 752). In the midst of this mid-level managers and practitioners are then left to convert all these considerations into action, which more than often conflicts. This leaves decision-making in such an environment an uncertain discipline.

Aven (et.al.2008) describes some useful guidelines under such uncertain circumstances, where the decision can be assessed according to ideal goals (visions), risk, barrier performance and cost-benefit assessment (Aven, et al., 2008, p. 192). These might identify the benefits of a decision, while preserving the integrity of the overall goals of the organization. In addition, following these guidelines forces the manager to formulate his or hers preferences according to outcome; whether it is aversion to loss or willingness to optimize risk (p. 194).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Another factor in the process is transparency in order for affected parties to challenge the basis for the decision (Aven, et al., 2008, p. 185). Viewing this factor in the light of how modern organizations appear as a "panopticons", where managers control the full view of the situation (which constitutes part of their basis of power) leaving its members with a fragmented view, seems to be a challenge to ensure transparency (Clegg, 1998). This might also contribute to decisions being *institutionalized*; the organization expects status quo maintained and avoid scrutinizing the process (Aven, et al., 2008, p. 194). Breaking off with established routines is less than desirable.

This might be an illustration of the tension between strategic and acute decisions within the Norwegian Police. Golding (2008) states that it is "impossible to manage police as it is by nature reactive" (Golding & Savage, 2008, p. 726). This might imply that the strength of the police lies in the tactical, immediate range of decision-making, while the strategic aspect is tainted by maintaining status quo. Crime analysis must therefore perform even better both in process and presentation to increase managers confidence in analysis being a relevant basis for making decisions (Evans, 2009, p. 202), and then especially according to societal harm (Tusikov & Fahlman, 2009, p. 155).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

# 7 Methodology

This chapter will explore different methods and their components that are used in examining problems within the social sciences. Initially it will describe the relations between theory, deriving a hypothesis and empirical research as this is the basis for this project.

Each method offers a unique angle of approach, and the significance of how problem and choice of method is co-dependant will be discussed here.

The methods used in this project and how they are applied will then be presented, alongside with considerations and argumentation which has led up to them. This constitutes this projects' research-design (Grønmo, 2007, p. 119).

Furthermore, in developing a research-design different ethical aspects presents themselves and these will also be discussed. Finally, the concepts of reliability and validity will be examined and correlated to the chosen methods in this project.

#### 7.1 Theory, hypothesis and empirical research

There are several approaches to examining a specific part of society. The results of observations can yield a new knowledge which can be expressed as a theory (inductive approach), or a perception of how society is structured can be transformed into a theory which can be proven true or false by testing it (deductive approach) (Befring, 2007, p. 19). These two are also connected given that different aspects of theories produced by observations can be tested by deriving new hypothesis from the theory, and vice versa. This creates a pendulum-effect between theory and empirical findings (Grønmo, 2007, p. 36). The hypothesis derived from the theory, is meant to express a specific view or opinion of how the area one wish to examine is perceived. As such, it functions as a tool to make the research-area more manageable (Befring, 2007, p. 90) As Karl Popper expressed: a hypothesis is not discovered, it is *invented*, and the object is then to obtain research findings that either will support or falsify this view (Fjelland, 2005, p. 98).

Mere observations do not necessarily lead to any knowledge as to *why* a phenomenon occurs (Fjelland, 2005, p. 88). They can confirm that it exists but in order to reveal the causes as to why, it is necessary to theorize the observations. It was considered as a starting point for this

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

research to construct a main question that this paper would try to find answers to, such as "Can more pertinent resource-allocation improve crime-fighting within the Norwegian Police?" This, however, turned out to be problematic as it would seem to require a full scale experiment in this work method to find any answers. This paper has its origin in the preliminary hypothesis that there are both formal criteria and organizational mechanisms deriving from them, which have crucial and perhaps inadvertently damaging, impact on how the police apply its resources.

This has resulted into a specific problem statement as presented earlier, and it appears to make the research more manageable to empirical scrutiny due to the fact that the information needed to examine it already exists in the police departments (field of research) without the need for experiments.

However, in order to find a way to examine the problem statement, it is necessary to operationalize the key concepts that it includes (Grønmo, 2007, p. 74). This implies that to find information which is relevant to this project, questions are derived from the concepts in order to make them measureable either in quantity, as an interpretation of findings or a combination of both. Such questions which properties the research is meant to investigate, are referred to as *variables* (Befring, 2007, p. 99). This also ensures that the variables are coherent with the original hypothesis. It is therefore vital that all elements of the research are constructed and discussed according to the principles of *precision*, *validity* and *no exclusion* of any aspects to the hypothesis (Grønmo, 2007, p. 28).

In terms of precision it is necessary that the hypothesis, variables and argumentation based on any findings are constructed and conveyed in a manner that prevents misunderstandings, or rather promotes easy understanding. This includes precise language and accurate definition of the concepts that the project deals with. This is significant as it will allow discovering whether the hypothesis can be tested empirically, which is a necessity in acquiring new knowledge (Befring, 2007, p. 90). This is also in reference to the different views of whether concepts merely are a linguistic construction, or if they always have a counterpart in real life (Fjelland, 2005, p. 68). In this manner it can help determine in what way the concept's counterpart exists in real life in order to be measured, or even if it exists all together. Such concepts identified in this paper to be crucial to the problem statement, are defined and discussed in chapter 5.2 "The Problem statement; defining its concepts and framework".

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

As far as valid argumentation is concerned these concepts and their definitions create strict guidelines that ensures coherency between the problem statement and fieldwork. When conducting the interviews it is necessary to establish in what way the informants interpret these concepts in order to increase the validity of any findings, and to maintain a logical argumentation (Kvale, 2006, p. 147).

Finally, the argumentation must be complete and not exclude any findings discovered during the research. This principle includes several ethical aspects. The level of honesty in presenting the results of a research can have a major impact when it comes to applying the newfound knowledge. Furthermore, it could also have ramifications in the event that other researchers should base their projects on incomplete findings (Befring, 2007, p. 65). As such, this will also affect the level of reliability of a research. Both validity and reliability will be elaborated on and discussed further in the context of this particular paper in chapter 7.5.

#### 7.2 The selection of research area and informants

Criteria which are held out to be important on making a valid selection, are the amount of informants in the research and random selection (Befring, 2007, p. 95). This is in order to ensure that any findings will be representative. In respect to selecting informants and the size of the selection in this project the main criteria would be the properties of the informant. As the focus of this project was crime-fighting strategies, police officers would be the first natural criteria to be selected on.

However, the significance of the positions held by the police officers in the organization was contemplated upon. Initially did the selection only consist of police officers attached to investigative functions in order to correlate information acquired from them with the quantitative findings regarding cost-efficiency. This was nevertheless reconsidered as this would exclude patrolling officers who constitutes a part of the overall crime-fighting strategy, and they were eventually included in the selection.

Furthermore, it was considered whether to include top-level management such as police commissioners. This was abandoned on the grounds that the objective of the interviews was to examine how strategies and allocation of resources were managed and executed on a daily

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

basis and close to real life. It was therefore determined that the focus of the interviews would be practitioners and mid-level managers.

Initially it was intended to also include a municipal councilman from the same area as the police departments' jurisdiction. This was considered on the background of gathering an outside view on how the police' main partner in cooperating against crime perceive the efforts done by their local police department. It was also a product of the notion that also other stakeholders in crime-fighting should have a say in the resource allocation. However, the requests of an interview to all fours municipals came up with only one response. This group of informants was therefore abandoned.

In respect to the size of the selection this seemed assured by the fact that four police districts were chosen to conduct the interviews in, and added up with interviews with one informant from each department and level, this would constitute a minimum of sixteen interviews with practitioners and mid-level managers. The four police districts were chosen on the basis of geography and they represent north, west, south and east in Norway. In order to ensure sufficient data material, the police department in the city or densely populated area within the police district was chosen.

In order to give an outline of the four geographical research areas, the following key attributes might be helpful: **Area A:** population approximately 79000, police stations with 80 employees. **Area B:** population approximately 24800, police station with 47 employees. **Area C:** population approximately 67700, police station with 110 employees. **Area D:** population approximately 165900, two police stations with 41 and 125 employees. There are some uncertainties concerning the various numbers of employees due to temporary positions.

#### 7.3 The research design of this project

There are several aspects which need to be determined before conducting the actual research. The theory and hypothesis as the origin of this project has already been discussed. It has to be determined what type of method that is to be used in examining the problem at hand. Furthermore, it must be considered on what *level* the research ought to be conducted on

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

(Grønmo, 2007, p. 27). The result of the preparations done according to these factors will constitute the *research design* of this project.

Within social studies an area of research can be examined by the use of a quantitative or a qualitative method (Grønmo, 2007, p. 29). The choice of method will determine how the research is conducted and how its' results are presented, either in the form of numbers or text. A third option is to combine both approaches in order to examine a problem both quantitative and qualitative, also referred to as *method triangulation* (Grønmo, 2007, p. 55). The advantage of this approach is that both methods can supplement each other. It can also strengthen the reliability of the research as the results of each method can be compared to one another.

The project which this paper is based on has applied both a quantitative and qualitative approach. This is due to the implications the hypothesis has on the choice of method. As described in chapter 5 several variables were derived from the hypothesis, and for each variable it was considered how it could be examined appropriately. A guiding factor was how the properties of each variable best could be expressed. Cost efficiency was deemed to be best scrutinized using a quantitative approach as funding and its use are measurable units which can be expressed through numbers. The sole objective of this variable was to investigate spent funding and what it yielded as far as clearance rates was concerned. A qualitative approach was briefly considered, but it was decided to be inappropriate due to the properties of this variable which are numbers.

How to examine properties of variables concerning the different perceptions of employees within the organization were not determined until the guides for the interviews started to emerge. The main consideration was deemed to be if these variables best could be examined using a quantitative approach, structured interviews or open-ended interviews. The quantitative method would have been executed by using questionnaires were the answers were structured in advance by different alternatives. This could have been an appropriate way if the objective was to conduct a survey of opinions on resource management ranging from negative to positive.

However, this method was not considered to be able to reveal the *structural causes* behind the employees' perceptions. In this respect structured and open-ended interviews can initiate

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

thought processes which might uncover the different factors that has formed the opinions of the informant (Kvale, 2006, pp. 55, 77). The guides for the interviews were constructed to ensure the interview would be focused on the variable in question, but the informants own reflections on their opinions was encouraged and considered to be valuable findings.

The interviews were conducted in the period of mid April throughout May 2010. For reference to the guides for the interviews conducted, see appendix A & B.

The selection of informants and levels this research was conducted on, are connected in many ways. The different levels in questioned are *micro* which study individuals, *meso* which refers to relations between groups of individuals and *macro* which examines the largest elements in society such as nations (Grønmo, 2007, p. 82).

As mentioned was the objective of the interviews to examine perceptions of employees connected to the variables and any causes that might have led to them. This would take place at an individual level of practitioners within the police organization which would be the micro-level. However, the selection also includes mid-level police managers and expert informants situated on levels above. Combined with studies of documents stating directives given by these levels and how they interact with another, this thesis also involves a viewpoint at meso-level.

	Risk-management on different levels					
	Employee	Mid-level manager	Sub-department level			
Micro	Perception of a coherent and anchored resource allocation and strategy?	Distinct and anchored managerial strategy? Identify different approaches to management.	Risk-management integrated in the organization?			
Meso	Adequate and facilitated training and education of employees in risk-management within the organization.	Intended and pertinent resource allocation within the district?	The dual managing of Norwegian police. Risk management as intended versus actual			
	The effectiveness of each department in reducing current levels of crime.		performance			

Table 2: Extraction of elements within risk-management performance on different levels

Table 2 illustrates some key aspects in examining resource allocation on different levels, and to reveal any discrepancies between the levels or any alignment and possible reasons for this.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 7.4 Analyzing the data

Several approaches to analyzing the gathered data were considered. As mentioned earlier the quantitative part of this research proved to be not possible to carry out, although the reason for this turned out to be a significant finding on its own as described in section 8.6. The method of analyzing the data was not determined prior to conducting the field work. Given that the interview guide mostly held open-ended questions, it was considered imperative, especially to the validity of the research, that it was both the informant's opinions and the reflections behind them which could indicate the most appropriate method of analysis.

Given the organizational similarity between the police districts and the fact that the Norwegian Police is centrally governed, some distinct opinions regarding the same elements appeared across the group of informants. Indications of this started to reveal itself during the field work period, and it became evident after all the interviews were concluded. It was then clear that a significant amount of the informants and their opinions on each variable, referred to the same elements of the organization. For instance, a significant amount of the informants referred to performance indicators when asked questions regarding the police districts strategies. This indicated that opinions could be categorized according to identified properties of each opinion (Grønmo, 2007, p. 248).

However, the goal of the research was not only to identify different opinions concerning the variables, but also to reveal causal structures behind them on the backgrounds of the hypothesis. Given the discoveries described above, two possible method of analysis were considered; meaning condensation and meaning categorization (Kvale, 2006, pp. 126-131). The latter implied categorizing and coding each interview in order to reveal variations and causal structures in the gathered data. In order to achieve satisfactory reliability and validity, such an approach ought to be conducted by several independent researchers to ensure sufficiently correct coding. The framework of this study gave room for only a single researcher, and this was one of the reasons this approach was deemed unsuitable.

The conclusion was therefore to apply meaning condensation on the data gathered. As mentioned, the interviews had certain properties that, when assessed after the field work was concluded, allowed them to be categorized into natural units. The different statements relating to each variable were then interpreted into more comprised opinions. They were then sorted

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

on the background of both the initial variable and the hypothesis. This enabled the possible findings of corresponding opinions and causal structures.

#### 7.5 Considerations regarding reliability and validity

In order to claim that a research project has led to findings which might generate new knowledge, it must be ensured to the best ability possible that the conducted research correlates with the topic it set out to examine which refers to the *validity* of the project. Furthermore, the examination of the variables in question must be performed correctly without defects built into the research-design in order to ensure the *reliability* of the project (Befring, 2007, p. 114).

In which manner the interviews in this project are recorded and processed can greatly affect the reliability (Kvale, 2006, p. 104). Transcribing interviews opens up to the possibility that the researcher doing it might project his or hers own language and concepts which the informant didn't use, but which perhaps makes more sense to anyone reading it. This alteration in language requires that the informant also has the same knowledge and interpretation of the used concepts as the researcher. One example of this can be the content of the concept "arrest". It is two different aspect of the same concept whether one is taken into custody for being drunk (not illegal), and being arrested for committing a crime. A common understanding of such concepts between the informant and the researcher, and avoid projecting an interpretation onto the interviews is crucial.

This is especially important in contexts where the researcher is examining areas of his own profession. The necessary distance to the work culture and institutions can be difficult to obtain. In this project all interviews are being recorded by hand, but also recorded on tape in order to be able to cross check uncertain statements. Key concepts are also clarified to the informant prior to the interview, such as the use of the word "problem". In this thesis and in the interviews the concept points to crime, not potential organizational hazards. Other variables are meant to identify the latter.

Narrative and leading questions can be another obstacle when collecting information untainted by the researcher. Suggestions in a question on what the answer might be can also

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

jeopardize the reliability. This can be hard to avoid as the researcher seeks and need confirmation on a specific subject. In this respect the interview guides can be of assistance to refrain from leading the informant to give desired answers the researchers seeks.

When faced with the possibility of making a finding, it is vital to assess whether or not the information has been gathered appropriately and its analysis performed correctly. One way in an attempt of increasing the validity in this paper has been follow-up questions and recording the interviews in order to ensure *valid* interpretations of the informant's opinions. Possible findings might lead to new questions and interviews that can help determine if the initial analysis correlates with what the informant meant, as conducting a test-retest (Befring, 2007, p. 117). The quality of the analysis can also be conducted by a second person to see if the same conclusion is reached. Possible findings and their basis in this project have also been discussed in this way.

In performing the meaning condensation it was continuously attempted to keep focus on the following to ensure satisfactory reliability and validity:

- Express the situation from the informant's viewpoint
- Understanding and loyalty towards the researched phenomenon
- Comprehension of descriptive methodology (Kvale, 2006, p. 128)

Particularly limiting the analysis against work- and organizational culture was challenging, as these topics were not to be the subjects of this study.

#### 7.5.1 External and internal consistency

The discussion of these two factors can be useful in further assessing the reliability of a study. Grønmo elaborates further on these (Grønmo, 2007, p. 230). The *internal consistency* refers to the relations between the different parts of collected data; an acceptable consistency exists if the different data are *plausible* compared to each other and the material as a whole. Illustrative of this might be that when asked a new question, the informant refers to an answer on a *previous* question to corroborate his reply. In order to enhance this factor it was, besides

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

the meaning condensation, kept track of statements which the structured display of opinions was not able to reflect. This was done in order to place answers into *context* if they seemed to conflict with previous answers (Grønmo, 2007).

The *external consistency* refers to whether the data correspond with other available information concerning the elements being examined. Such information might be useful to underpin and possibly confirm potential findings, but it might also be a pitfall given the fact that unsupported findings might be new knowledge, or simply a sign of poor reliability. The collected data in this study have been compared to both managerial documents within the Norwegian Police and scientific research.

#### 7.6 Ethical reflections

Ethics within the disciplines of scientific research refers to all moral aspects of the activity and the possible consequences that might occur if proper precautions are not taken. This ranges from deliberately producing and publish false results, to conducting research in a damaging way for the informants (Befring, 2007, p. 65). Ethical aspects of this project have been considered according to the principles of legal access to the field of research, informed consent, anonymity, professional confidentiality and information to the informants on how the collected data has been used.

A written presentation of this project was sent out to all of the selected police districts prior to the interviews, along with a request of accessing the organization in order to collecting information and conducting interviews with employees. All of the police districts responded positive to this request.

All of the informants were informed of the nature of this project before starting the interview, along with the fact that they would be made anonymous in this paper. The identity of each informant resides with the author. It was made clear to the informant that participation in this research was not compulsory, and an active consent to the interview was requested from each individual.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The informants in this research who are police officers are through their profession and accordingly by law obligated to exert confidentiality in matters concerning any persons' privacy or other aspects of the police organization that are decided to be confidential. Each informant has been informed that such confidentiality must not, nor need to, be broken regarding this research. All information gathered has also been scrutinized in retrospect in the events such breaches might have occurred.

The informants have also been offered a copy of this paper so that the use of the information they have provided can be examined by them.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 8 Findings

This section will present the findings in the survey that relate to the presented problem statement. Some of the sections, besides presenting a finding, will also provide a backdrop to complement or support other findings.

#### 8.1 The desire to prevent crime

The findings indicate that the informants have a clear and defined perception of what their work ought to be focused on. Very few stated that they felt their mission was to *combat* crime, but rather primarily to *prevent* crime.

Another noteworthy result appeared in relation to the question what the informant associated with the phrase "reducing crime". Only four out of sixteen respondents stated a "decrease in reported crime", while ten respondents stated "increase in public safety" (4) and "crime prevention" (6). This indicates that the informants are well aware of unrecorded crime not being visible in the crime statistics.

#### 8.2 Excelling at emergencies

Different aspects of the responses to several questions indicated strongly two factors having major impact on the resources of the organization; maintaining round the clock *emergency services*, and responding to *occurring incidents*. Informant H, being a manager of an investigations department, replied when asked what determined the size of the department; "First priority is distributing resources to establish emergency services 24/7, the rest is simple math."

This demand for round the clock emergency capabilities is not one which is assessed and determined locally, but is stated by governmental level which sets forth that the police are to be the central emergency institution (Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police], 2004-2005, p. 71). This was also confirmed by informants in the survey, although interestingly enough to the backdrop of strategic work.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Informant F gave a description of the organization as "outstanding as an emergency institution, but falls behind in performing strategic police work".

One finding which might support this view came to when mid-level managers was asked the question "What is your understanding of the concept 'resource allocation' in your daily work?" Four out of ten managers gave statements according to the opinion "Ensuring that the service roster has full coverage".

These mechanisms of alert-mentality were found in both investigatory work and patrolling. There was a clear policy throughout the survey that initiating immediate investigation and preferably complete the case at the initial stage was emphasized as a prioritized work-method. The reason for this was unanimous; an attempt to reduce the amount of cases pouring over the investigators. The origin of this approach was stated to be instructions given from the Police Directorate which could account for this finding being so consistent throughout the different geographical areas.

Another pattern in the survey was intersecting service rosters for police officers and investigators in the week-ends. A total of eight out of ten managers stated that investigators were allocated to the patrol department in the week-ends. Two main reasons were identified for this particular use of resources; to keep the work rotation to no more than every third week-end for the patrol officers, and to increase the numbers of patrols in the week-ends due to a rise in public disturbances.

This build-up of patrol resources in the week-ends to increase the readiness of the organization was identified in the survey the one phenomenon with the greatest impact on both patrol and investigatory manpower in respect to *long-term* efforts. It is not argued that this arrangement is not prudent, but there was not identified any views by the informants which actively justified an increase in resources due to a rise in public disturbances, as opposed to a rise in any *other* category of problems dealt with by the organization.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 8.3 Contingency

This section will present findings which might underpin that the emergency-mentality affects resource allocation beyond the tactical level, and that risk management might be competing with the concept of *damage control*. Fitting resource allocation within the frame of risk management implies among several things identifying factors which can threaten strategy, the likelihood of this happen and managing the outcome of this equation in order to affect risk.

Approximately half of the informants gave statements indicating that the lack of contingency approaches is a vital contributing factor that allows damaging incidents to evolve and eventually have serious negative consequences to the activities of the organization. An example of such incident is referred to in the paraphrase below. In addition to this half of these conveyed that a rigid organizational structure enhanced this negative process, as access to relieving measures was arbitrary and deployed too late.

There are two elements identified as noteworthy in this respect; the damaging incidents were not *sudden* or *acute* by nature, but slowly evolving. As illustrated in the previous section acute incidents seem to be well handled. One example of such an damaging incident was independently illustrated by informant F and G at the same geographical unit:

"For months the management knew that the one person with the expertise to conduct interviews in cases involving child molestation was leaving, and no measures were taken to ensure that this knowledge was replaced. When the person finally left these cases piled up and both the parties involved and the group trying to cope with them, suffered." (Informant F)

"The group which dealt with violence and sexual assaults was almost allowed to perish due to lack of manpower and increasing case loads until management understood how grave the situation was, but only when confronted with the performance indicators". (Informant G)

The other element is the mentality revealed by the informant's statements; instead of contemplating how to act in order to *avoid* that things go wrong (risk management), the lack of approaches as to what to do when things *do* go wrong, is the focus. Thus, the "contingency-approach" comes across as more of a *damage-control* strategy, rather than risk management.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

As far as the rigid organizational structure is concerned, several reasons were identified making the damage-control difficult. Some of these will be presented under section 8.4.1, but uncoordinated police efforts were pointed out by a few informants as a negative factor. This problem could consist of the patrol-department making several unplanned arrests outside of office-hours, without taking into consideration the other resources affected by this; investigators who had to interview the prisoners, the possibility of arraignments and manpower needed for this, and also prison capacity if a person needs to be held in custody pending investigation.

This overlaps to a certain degree another element of the survey. When asked what elements managers thought to be inhibiting and constraining to the organization, seven out of ten managers made statements coinciding with the opinion that tasks that were not directly related to crime-fighting, had *forced* priority. This could entail court duty, safe-guarding patients in custody or various transports. Managers felt that whatever was left after these tasks was taken care of, were the resources they had to their disposal to enforce the main goals of the department. Furthermore, these tasks were for several of the managers not negotiated on a long-term basis, but on a day-by-day allocation.

Thus, the effect of this can be seen manifested in responses to the question whether the informant did have any general thoughts regarding the current resource allocation within his section. A total of twelve out of seventeen responses coincided with the opinion of *occurring incidents* control the manner of resource allocation.

These occurring incidents were perceived to be interruptive of regular work as their nature or regulations did not allow them to be given a lower priority. This was stated as one of the main reasons for being unable to work strategic, and it might also contribute to explain the concern for the lack of contingency plans when employees expect that work is inevitably going to be reactive. Informant A summed up his work situation the following way: "We are guided by rules and goals which are constantly interrupted by on-going events."

#### 8.4 Performance indicators

One concept which proved to have a significant impact on a large part of the survey was "performance indicators". The following section will outline the contents of this concept as conveyed by the informants.

The descriptions of the indicators outlined here are particularly relevant in reference to how problems are prioritized which will be presented later on. It must be stressed that the descriptions listed below are what the informants perceived that the concept "performance indicator" entailed in their work, as opposed to the official definitions of the indicators applied by the Norwegian Police.

Performance indicators as an organizational phenomenon will be elaborated on in section 9.1. As a backdrop to the presentation of the following findings, it is worth mentioning that the indicators are mainly connected to investigation. They can, however, be affected by others than just investigators; patrol officers making an arrest and seizure of an illegal substance and getting an immediate confession will count as one solved case without having been in contact with an investigator.

The numbering is not in reference to priority, but to separate between them. These descriptions apply in this thesis in all references to the term "performance indicator":

- 1. **Processing time:** priority given in order to complete cases within their given deadline (arrears).
- 2. **High number of** *incoming* **cases** one example of this is repeated offenders.
- 3. Incoming *individual* cases which falls under high priority according to the **Attorney General** severe cases such as homicide or sexual assaults.
- 4. Focused and intensified *police effort* in order to increase number of cases within a certain category this is done as a way of illustrating that the Police have tried to achieve certain central priorities. Such categories exemplified by the informants were traffic citations, domestic violence and narcotic offenses.
- 5. **Clearance rate** percentage of criminal cases solved.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The clearance rate was perceived as being a consequence of how well the organization performed on the other indicators, but some evidence suggests that this indicator also is subject to attempts of direct affection which will be illustrated in section 9.59.5.

It is noteworthy that indicator number 3 does not reflect an actual "problem" as understood as a pattern or a cluster of incidents. Nevertheless, these were identified in the survey to be the cases which resources were allocated with the most ease.

Indicator number 4 is not necessarily given priority on the backgrounds of an *identified* problem; the police focus resources and thereby statistically increase the problem in order to perform well according to central priorities.

Early in the survey it became evident that performance indicators played an important and influential role in the management of the police organization. Some impacts from this were natural and expected which merely confirmed the indicator's function and why they are implemented. Nevertheless, some identified consequences were what might be described as a chain reaction; the use or emphasize of an indicator had unforeseen or unintended impact on other parts of the organization. Particularly the *extent* of the impact the indicators had on how resources were allocated and the informant's perception of performance indicators as a concept, seem to be noteworthy.

Illustrative of this was the replies from both practitioners and managers when questioned their knowledge concerning managerial strategy and what this strategy entailed. Five out of six practitioners stated that they perceived that the strategy of the police station was to achieve the set requirements related to the performance indicators. In addition a total of eight out of ten mid-level managers stated that their managerial philosophy revolved around reaching the same requirements.

This finding indicates a major breach between the chosen strategy of the Norwegian Police and how it is implemented at the executing level. The finding indicates that there is a disproportion in the strategy – performance nexus, as elaborated on in section 6.3, as strategy is perceived to be synonymous with the indicators. Corroborating the strategy of the Norwegian Police presented earlier in this thesis with the description of the performance indicators in this section, shows that the indicators are not mentioned as a strategy or as a part

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

of it. It is conceivable that this misconception might be a significant obstacle in fully implementing strategy.

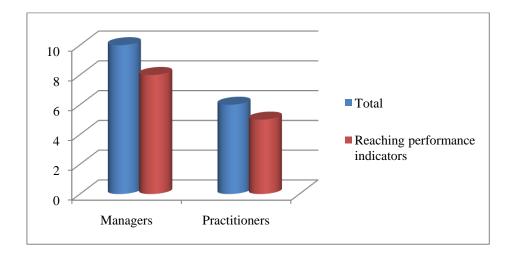


Table 3: Informants' responses regarding their perception of the managerial strategy were they work.

Table 3 illustrates the amount of informants giving statements underpinning that they perceived the strategy of their work-place to be synonymous with reaching the described performance indicators. The responses are divided into managers and practitioners.

A crucial element of understanding why these indicators appears to have a profound impact, is the formal basis of the work they are meant to measure; investigation. This work is by law led and directed by the Department of Prosecution even though this is an integrated part of the organization. As follows by section 7-5 in the act regulating the work and structure of the Norwegian Prosecution (abstract):

"It is the responsibility of the prosecuting authority to oversee that all investigations are in accordance with law and regulations and, if needed, issue decrees regarding the conduct of the investigation.

The prosecuting authority issues further decrees regarding the priority and conduct of investigation in criminal cases." ("Påtaleinstruksen [The regulation of prosecution]," 2009)

Any resource affiliated with the investigation of a criminal case can therefore formally be controlled by the Department of Prosecution. Based on this both isolated investigatory decisions are made, as well as decisions deriving from information provided by the performance indicators.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

This will be further elaborated in section 9.2. However, it is worth to take note of this mechanism as it acts as a supplement to the informant's views. The next section will illustrate this more closely as findings are presented.

#### 8.4.1 Reactive efforts

"Performance indicators reward the past". (Informant P)

This statement illustrates the nature of these indicators which also was corroborated by the survey; they are an expression of already unfolded events. On the background of this, the survey identified several factors which potentially counteract the desire to apply resources in a strategic and proactive manner.

Perhaps the most prominent finding in this respect is the opinion identified in the statements given by mid-level managers when asked what factor they regarded as inhibiting in their management. Statements made by five out of ten managers supported the opinion "performance indicators compel prioritizing between committed crimes and preventing future ones". In this context, committed crime implies investigation as the main strategy against crime. This finding was further exemplified by informant D: "A high clearance rate can be achieved by solving old cases, even though new ones emerge and are not being dealt with." As such, the indicators seem to work as a mechanism for attracting resources to the investigatory and reactive end of police work.

This finding seems corroborated by statements made by practitioners where four out of six gave statements coinciding with "If conflicting with an identified problem, performance indicators are prioritized", and three out of six coincided with "Work is in general controlled by single, occurring incidents".

Informant Q states: "Everybody knows that managing according to statistics does not reduce crime, including the management, but never the less we continue doing it".

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Another identified factor which enhances reactive resource allocation is how redistributing and focusing resources to combat an emerging problem not only fail to appear on the performance indicators, but they also punish the initiative as pulling away resources might mean shelving cases which for instance damage clearance rates. Four out of six practitioners and five out of ten mid-level managers pointed to this fact when asked to comment on the allocation of resources within their own department.

As to how managers perceive what the concept of "resource allocation" entails, findings suggest that there exists a breach on this level counterproductive to working strategic. Six out of ten informants stated that allocating resources in their daily work was done according to a "case-by-case" principle based on whatever indicator relevant for each case, as opposed to strategic assessments.

In other words, the cases were distributed piece by piece to the employees, instead of the other way around; coherent assessment of the resources needed to solve a *problem* rather than each single case. Informant G states: "Priorities given from my managers are usually concerning single criminal cases, not to deal with trends or any larger entities." This approach is also observed by Ratcliffe, referring to it as "whack-a-mole"; as different moles pops in and out of their holes, the strategy is to defeat them one by one, being a metaphor of dealing with crime on a case-by-case basis.

Isolated criminal cases versus identified problems were also identified to be subject to a conflict which might be understood as yet another impediment for performing strategic work. Four out of six practitioners experienced on a regular basis that crime patterns constituting an identified problem are given little or no priority if conflicting with performance indicators. In the opinion of informant J this priority could be traced to the activity plan of the unit: "The activity plan is only an expression of the performance indicators, and has no vision as to how the police can make a difference." One given example of this was the identification of active prolific offenders who were not dealt with due to existing case loads.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 8.4.2 Fragmented efforts

Findings in the survey suggest that performance indicators in some cases might act as an obstacle when attempting to gather resources in combating a problem. This section will focus on what factors these are and some of their consequences.

It was not identified any particular indicator which was significant as to how resources were allocated; they interacted according to for instance the severity of a case which more easily triggered resources, or category perpetrator such as juvenile offenders where there are requirements as to processing time. The main constant factor in this picture seemed to be that responding to one indicator inevitably had an effect on the others. For instance, temporary redistributing of resources due to a severe case would damage the processing time of the group losing manpower.

However, the priorities set forth by the Attorney General were understood by the informants as a vital factor; the indicators seemed to revolve around these. The instruction as to which categories of cases are to be given priority, are clearly listed in the circular from the Attorney General. The challenges begin when they are attempted implemented by the police, as expressed by informant P: "Everything is a priority!"

It became evident that moving resources from one part of the organization to another in order to "serve the greater good" was not a widespread notion; there are simply no incentives for doing so. Ten out of sixteen informants made statements which underpinned the opinion "performance indicators lead to fragmented crime-fighting efforts", as the organization attempts to follow up every crime category.

The fragmentation derived from primarily two factors. The first one is expressed in the words of informant E; "It creates a sort of 'tunnel-vision', each group within the police has their own indicators to fulfill." Redistributing resources might result in an increased work-load on the members of the group which could affect the performance indicators, such as processing time and clearance rate, in a negative way. There appear to be few incentives in this respect.

The second factor is that the central priorities creates a situation where the employees perceives *everything* to be a priority and accordingly resources are thinly spread out in order

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

to meet them all. It was the view of several informants that there existed little or no room for making actual priorities according to how they experienced reality.

The main reason for this was stated to be how the priorities were given by the Attorney General; the case categories listed were either "high priority" or "very high priority". Informants felt that if problems besides the prioritized cases were to be handled, this had to be done with additional resources such as working overtime. Ignoring or shelving cases in order to combat emerging problems was in general not accepted by the department of prosecution. When looked upon isolated this priority is understandable; the prosecution's responsibility is due process. Nevertheless, this may illustrate the manner in which Department of Prosecution controls the allocation of resources.

#### 8.4.3 Performance indicators as basis for orientation and decisions

The subject of this section will be to outline findings as to how the informants orientate themselves as far as crime is concerned, in addition to identifying factors significant to how decisions are made. Both elements seem important when examining the allocation of resources, as they comment on the basis by which both managers and practitioners exercise their work.

It was deemed necessary to identify which sources of information the informants used in order to keep themselves up to date with the development of crime. The reason for this was the assumption that the type of source affects the informant's perception of crime, and thereby also the actions and decisions as to how resources should be used. The following figure illustrates the informant's main sources concerning crime:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

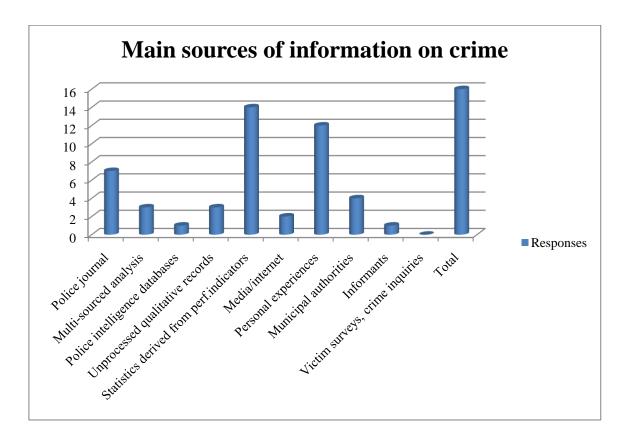


Table 4: Informant's main sources on crime

Table 4 illustrates the main sources stated by the informants in which they relied on when scanning crime, creating an overview of what they perceived to be the situation.

Particularly the two sources "Statistics derived from performance indicators" and "Personal experience" stands out in the figure. The first source needs some explaining as to its contents. The statistics referred to by the informants were the amount of registered offences within a certain period of time. This finding seem to be supported to some extent by observations made by Kleiven when examining which sources police practitioners rely on; mainly *closed sources* and particularly police informant, police officers and police data (Kleiven, 2005, p. 44). This is also consistent with the findings of Innes, Fielding & Cope (2005).

There was not identified any common criteria for assessing these numbers as they were retrieved by the informants themselves. The main corroboration of these numbers to be identified, occurred in cases of significant rise in registered crime were the statistics were sought explained either through own experience or the ones of colleagues. As such, there is a possible dynamics between the two sources mentioned here.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Historic data are essential in order to perform a pertinent resource allocation. Patterns in such data can provide predictability as to future incidents (Aven, 2007, p. 52). These data must be processed accordingly for them to make sense and act as a basis for deciding resource allocation. It was, however, not identified any significant finding of informants using data which were processed or contextualized in any way, for instance by a crime analyst.

A few informants did say they consulted police officers (usually an investigator) who had been assigned an analytical function as a part of their job, but most of the informants relied on the statistics as they were recorded. Although not being a part of the survey, the informants who stated they consulted these part-time analysts was questioned whether the analysts themselves based their products on multiple sources. The replies indicated that the other main source also here was personal experience applied when interpreting the original statistics.

The following illustrated results from the analysis of the interviews seem to further underpin the notion that orientation concerning crime and decisions concerning resource allocation, are not based on processed analysis rather than being a performance-driven process based on the performance indicators. A consequence of this seems to appear, not only in connection to this finding, but also to several of the other presented findings relating to performance indicators; they become a goal themselves.

The process of identifying a problem in order to focus resources appeared to be affected by central priorities. Out of sixteen practitioners and managers, ten gave statements indicating that these priorities determined which type of crime the police unit were to identify. The driving force behind this is how the amount of certain cases are considered to be illustrative of the efficiency of police efforts.

A conflict deriving from this were the experience of pressure from central authorities felt by the informants to discover crime according to the central priorities, while other locally identified problems seemed to be downgraded. An example of this was how central priorities focused on narcotics offences, causing "bursts" of police efforts on a regular basis with the sole purpose to increase the number of cases. Another example was traffic controls with exclusivley aimed at increasing the numbers of controlled vehicles. As such, central priorities seem to have the potential to "taint" the process of identification as a basis for resource allocation.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The topic of how the informants perceived the process of problem identification within the police district, revealed a *possible* noteworthy negative finding as well. Only one informant stated that problems were identified on the basis of or contributed by information from the local municipal authorities.

In Norway the government decided in 2007 that so-called police-counsils were to be established where a main purpose is to share information on potential problems (Politidirektoratet [The Norwegian Police Directorate], 2007a). Such counsils were at the time of the survey established in all the districts in question, which therefore makes this finding somewhat surprising. As explained in section 7 the survey had to exclude researching if the views of the municipals coincided with the police units, so there exists no information from "across the table" concerning possible reasons for a lack of municipal problemidentification.

To conclude this section the survey made an interesting finding as to what type of performance indicator the managers stated they were missing. Six out of ten managers pointed to the fact that all of the current performance indicators expressed *quantity*, and there existed none which expressed *quality*. This was particularly in reference to incidents where resources had to be redistributed, affecting indicators in a negative way, and this effort is not being accounted for as there exists no consistent indicator able to describe the contents of the efforts. It might be fair to say that this is a significant factor in relations to the performance of resource allocation, as it is not just the amount of resources focused on a problem which matters, but also how it is exploited.

#### 8.5 Identified problem-driven resource allocation

The following section will briefly present some examples of problems where the informants stated that deliberate assessments had led to some affect on resources, either in redistribution or exploitation. The findings presented here describe how the police have a perception that a problem exists as opposed to individually incoming cases. As such, this seems at first glance to be consistent with working problem-oriented, where crime patterns is the basis for resource allocation and not each case. It is vital to this thesis that findings in this way are balanced in order to convey a coherent picture as possible. Several of these categories are already mentioned, although in a different context than here.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

A clear focus on immediate investigation in order to complete them at an early stage was identified as a method of limiting the amount of cases reaching the investigative departments. This was a particular focus within the patrol divisions. Simply register an offence and sending it off to an investigator affects both work-load and processing time in a negative manner.

Nevertheless, being a new policy, or rather a new awareness of it, it could not be identified any significant pattern of *redirecting* resources related to the implementation of it. As such, this *could* pose as an example of an attempt to better utilize existing resources. Although, a few informants stated that the cases being completed through immediate investigations were offences where the perpetrator was already more or less known from the beginning, and the burden of evidence somewhat fulfilled early on.

As illustrated earlier, public disturbances in the week-ends have a major impact on resources. An attempt to look at this phenomenon in an isolated an objective manner suggested that the problem was clearly identified, assessments were made as to resources needed and finally they were allocated accordingly. Furthermore, there was a clear pattern of a constant reassessment of the problem as well as the affect of the resources. As the following table 5 illustrates, the resources allocated to this problem also coincided with the informant's opinions on what they perceived to be the major problems within their geographical area of responsibility:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

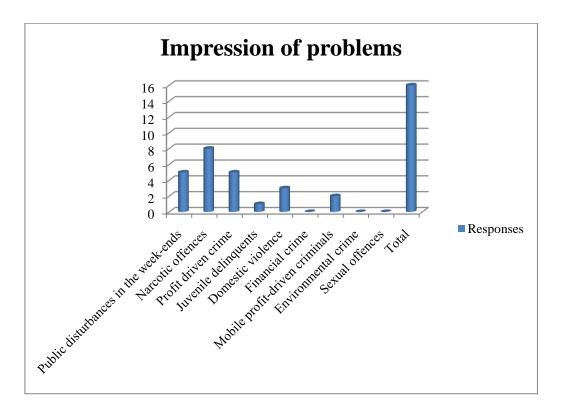


Table 5: Informant's impression of problems within the police station's geographical area

A manager of a patrol department illustrated this when describing how he performed what he referred to as risk-assessments relating to the week-ends. Based on reports on the previous week-end from his watch commanders he assessed which resources needed for next week-end. The week prior to was spent raising the necessary manpower. Friday he distributed an order to the commanders and used their reports to control whether it had been enforced or any reasons as to why not. The next week the cycle repeated itself. He had only two objections regarding this; first he felt that almost his entire function revolved around constantly raising manpower, second that this was the only problem this work-method was applied to.

Within the field of investigation the informants pointed to efforts made against prolific offenders. Through following up these offenders relentlessly the tactic was to arrest them for any offence and have them incarcerated on the backgrounds of being a prolific offender. Assuming one offender could be the source of five burglaries this one incapacitation might prevent numerous offences. This appears to be a targeted investigatory approach in order to maximize the effect of the resources used.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

There were also examples of manpower from different police districts being pulled off their regular tasks in order to work together against mobile profit-driven criminals in particular from eastern-Europe. One of the main reasons for this was an inability within the Norwegian Police to focus on the actions of these groups beyond the district borders. In relation to this informants stated that the top-management of the different districts actually accepted an inevitably poorer result on the performance indicators to combat this problem.

The final example identified is by no means a new work-method, but looking at it from a stand point of resource allocation might be a somewhat new perspective. In cases regarding severe criminal offences informant stated that resources were easily both redistributed and critical assessments were performed to have the right kind of resources in relation to the problem at hand. Typical of these cases are homicide and severe sexual assaults. This approach seems by all means appropriate on the background of severity. Nevertheless, some informants were asked why this resource-mentality is not applicable to other less severe problems. The replies were either that the notion of this had not occurred to the informant, or that the structure of the organization prohibited this as illustrated earlier.

#### 8.5.1 Problem-oriented Policing

One part of the survey encouraged the informants to comment on the implementation of problem-oriented policing (POP) in Norway. A potential significant finding was identified through an interview with police superintended Børstad at POD, who stated that the implementation has not yet been evaluated on a national level. The reason for this remains unknown. This section will present some findings which might indicate that such an evaluation needs to be conducted, as the flaws pointed to by the informants seem to be structural.

An expert interview was conducted with police detective inspector Pål Joar Nålsund (referred to here as "project manager") who had been in charge of a pilot project applying POP as a work method. The information provided by him was then corroborated with replies given by the other informants, and are presented here with this interview as a background. It might be beneficial to interpret the following findings with the already presented ones as a backdrop, as

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

the implementation process seems to be illustrative of the structural resistance built-in the organization.

The project followed the cycle of the problem analysis; identification, scanning and analyzing the problem, developing and implementing measures, and evaluating the efforts. This model was also somewhat known amongst the informants, as six out of seventeen stated that POP was synonymous with the problem-analysis. However, both the project manager and over a third of the seventeen informants pointed to the fact that the analytical function needed in the method was either hampered or completely absent. The project manager illustrated this when describing the analysis performed in the project:

"The analysis was more or less performed solely on my own. It was exhausting work as the electronic information systems in the police are not adequate and the information required seemed impossible to retrieve; it had to be extracted case-by-case and then correlated with the police journal. There exists no separate analysis unit in the police district; one police officer is both an analyst and an investigator and both functions suffer. It is not possible to 'order' an analysis.

An analysis unit ought to consist of competence besides police educated employees, in order to utilize other tools and sources of information. External expertise has a different approach than the police. Such a unit can also serve other authorities than just the police. "

It is worth taking note of one of the reasons as to why this particular project was initiated. When the project manager was questioned as to why the project was assigned and carried out by the patrol division, he stated that this was a deliberate choice in order to create a more interesting work environment and a more targeted work-effort: "Patrol-duty has been performed by the concept of 'let's take a car and drive out without any purpose'. This demotivates the employees." This concerns the very essence of resource allocation. As such, it is conceivable that the possible causes presented here as to why this implementation might have been flawed in any way, could be indicative to the organization as a whole when assessing the current allocation of resources.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Furthermore, it appeared that the method was poorly anchored in management as implementation was attempted to start at ground-level, instead of executing it from the top down. As a result, the level of knowledge concerning the method was critically poor amongst the top-management according to the project manager. He assumed that this was a major impediment in integrating the method.

A possible consequence of this was the clear pattern throughout the survey that the method existed within *separate* projects and *parallel* to the daily life of the organization, without any redistribution of resources or funding. Over a third of the informants, including the project manager, made statements underpinning that the method was welcomed by management as long as it did not affect resources. Informant M, a department manager, was leading a POP project and stated:

"I'm afraid the project has grown too big and I don't have the time, because there are so many other regular criminal cases to take care of. The project has been initiated as a consequence of severe violence being committed. The municipals has backed the project with over NOK 600.000,- while the police has not contributed with any funding, but are in fact leading the project."

Furthermore, the project manager stated: "The managers says 'OK, problem-oriented policing? You're in charge of this!' and thereby delegates themselves away from the method". When questioned how the final evaluation was utilized the informant stated that it was conveyed directly to the top-management. Informant summed up the management reaction: "OK, it works, thank you for the effort", and no further plans were initiated.

There was a general opinion throughout the survey that working proactively called for the need of *added* resources instead of altering the use of existing ones and this seem consistent with replies given concerning this particular method. Furthermore, a few informants made comments on the fact that the method being carried out as projects, acted as an isolating factor in itself preventing the intended integration.

When scrutinizing in what manner the different projects came to an end, two main reasons were identified based on coinciding statements from thirteen out of sixteen informants.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Furthermore, due to these reasons, the projects seemed to terminate themselves rather than on the basis of a decision or evaluation concerning whether the problem had been solved.

First, there is a lack of relevant indicators which are able to describe whether the efforts made in the project are useful or not. The method has an arbitrary effect on the existing indicators depending on the measures implemented, as statistics and case-loads may soar due to increased police efforts.

Second, informants felt that "regular" police business suffered, by which the informants meant investigation and the patrol capabilities of the organization, as it was difficult to pull resources away from a project already initiated. Not having resources on stand-by to deal with appearing tasks with forced priority as presented in section 8.3, was a major concern.

#### 8.6 Resource accountability

Keeping track of funding and human resources is a vital part of pertinent resource allocation as it allows for assessments concerning desired effects and whether or not production is in fact maximized using the least amount of resources, applying a cost-benefit perspective. The following section will present the results from attempts made to corroborate funding according to mainly clearance rate in order to obtain a somewhat crude cost-benefit analysis, or at least develop a financial perspective to be compared with the other findings in the survey. In addition to this, some viewpoints around accountability concerning human resources will be briefly dealt with.

Every department of investigation included in the survey was asked to provide an overview of expenses connected to the investigation of the criminal cases being processed within a fiscal year. The intention was to see if there could be made any significant finding as to the socioeconomic side of using investigation as a method of combating crime; do society get a maximized effect of funding allocated to police-efforts when corroborated with the organizations own performance indicators?

Unfortunately, such an analysis could not be carried out as it turned out that none of the departments kept budgets in a way which made it possible to identify specific expenses

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

connected to a specific case. There were exceptions to this in large, complicated cases where the head of investigation kept *personal* records of extraordinary expenses such as interpreters, analysis and so on. Salaries and regular expenses were however not included. According to the department heads the budget was awarded to the entire police entity, such as a police station with all its different functions. The result of the budgets being constructed this way was that the attempt of identifying the funding per case versus clearance rate ratio was abandoned.

This finding also coincides with the operational analysis performed by POD, where the report questions whether the practice of accounting are adequate in keeping track of elements which might lead to exceeding the budgets (Politidirektoratet [The Norwegian Police Directorate], 2010a, p. 17). As to reasons for this accounting practice, the survey was unable to further shed any light in this respect.

However, one finding did appear to relate to the cost-benefit perspective. The survey indicated that the emphasis on reactive investigative efforts has had autonomous consequences to both human and financial resources of the various departments. Seven out of ten managers stated that they over the years have experienced a heightened threshold for investigative work relating to the burden of evidence and the multitude of investigative methods. In addition to this, the complexity of criminal cases has increased. The latter was exemplified by the need of interpreters more often and investigations exceeding the borders of the district. As a result, according to the informants, there is an increase in financial costs and a decrease in efficiency.

Encountering difficulties concerning the accountability of investigatory resources, the survey also looked into the patrol divisions regarding the same issue. When attempting to identify mechanisms within the organization which kept track of the use of human resources, informants stated that managing *patrol resources* were particularly challenging. Informant L stated that there was no objective analysis indicating to him how the patrol division he was leading was meant to be used.

It might be conceivable that the lack of a managerial tool to better control human resources is also, in relation to this topic, expressed by earlier findings. This being that the organization seems to require two sets of manpower in order to work both proactive and reactive.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

To conclude this section, the cost-benefit perspective and the phenomenon of reactive policing was stated by informant K: "The police are measured by its reactive work, and resources are allocated accordingly. As far as financial costs are concerned, I cannot see any natural mechanism in the society which might slow down public expenditures within crime-fighting, there seems to be no conscious thought behind the priorities."

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

#### 9 Discussion

The presented findings entail different aspects depending on the perspective. This chapter will further scrutinize them by discussing some of them in an attempt to identify and illustrate possible causes and effects. In addition, the findings will be corroborated with other scholars and their viewpoints on the topics discussed here. The latter is also intended to increase the external validity of this research.

#### 9.1 Performance indicators as an organizational concept

Several findings in this survey indicated that the informants had a perception of performance indicators being a significant affecting factor in the manner resources are allocated within the Norwegian Police. This is not necessarily a counterproductive element in managing an organization; in fact they are a crucial aid to managers.

The need for performance indicators within any given organization is evident, as there has to be some tool available which provides information whether or not the main goals are being fulfilled or not. Performance indicators can be described as:

"...all kinds of measuring methods or qualitative assessments which are being used in the management of an enterprise at different levels. The performance indicators measures or describes directly or indirectly in which degree the enterprise is able to fulfill its main goals within a given period (for instance a fiscal year)." (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 19)

As such, these indicators are a managerial assessment tool in regards to resource allocation, as it can provide information concerning impact of existing resources and the necessity for others. The National Center for Financial Management set forth three qualities that a performance indicator should entail; it must be possible to affect them, they need to be reliable, and there has to be a way to verify them. Utilizing these qualities in the daily operations of an organization might contribute to identify what information is relevant to its

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

management, and what could have the potential to alter the direction of work away from the main goals.

In addition, the balance in implementing reasonable indicators should consider the organization's distinctiveness, risk and essentiality:

- 1. The distinctiveness of an enterprise can be derived from its purpose, its size and complexity.
- 2. Risk concerns challenges which can have negative effect in achieving the goals.
- 3. Essentiality must be assessed on the backgrounds of main goals, political signals, departmental requirements, in addition to developments in external conditions and necessary changes identified by management through strategy. (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006, p. 22)

The first and the third topic deal with the necessity of *aligning* the chosen performance indicators with the purpose and role of the organization. This is reflected by the mentioned qualities; if an indicator cannot be affected by the organization's efforts, it might be in its place to consider whether the role of the organization has changed and if the indicators need to follow. This could be the case of the Norwegian Police which will be further discussed in section 9.2.

Statements made by informants reflect that there are several reasons as to why it is important to manage certain aspect of the Norwegian Police according to the performance indicators as presented in this thesis. The common denominator between them is that they all are quantitative indicators expressing a certain *amount* of the production. This underscores a vital argument as expressed by informant D, head of an investigatory department: "The current indicators are useful and necessary in measuring *efficiency*".

Focusing on efficiency is vital on the backgrounds of providing citizens a service when it is needed, and to protect due process. Some citizens preferably report crime to the police as they seek restoration or vindication to their consequences, and inefficient case processing might lead to a more lenient sentence if the case reaches the courtroom a year or two after the incident. Furthermore, the longer the time from an incident occurred, the more unreliable the evidence might become. This could lead to a wrongful acquittal or sentencing.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

However, an effective management needs to entail more than just quantifiable aspects as requirements and demands for accountability changes and increases. This is illustrated in an interesting point expressed Gillespie in "Designing performance management systems for Australian policing":

"With this in mind, effective performance management system design must encompass two agendas: the public accountability agenda of conforming and reporting at agency business unit level; and the management agenda to motivate police officers towards achieving required targets and priorities." (Gillespie, et al., 2007, p. 171)

One way of considering this point is that the management of the police is no longer an internal matter, but a dynamic process between the organization and the surroundings. The question is: how successfully do managers perform as mediators between these two elements; applying resources efficiently in reaching, not only any target, but the right ones?

#### 9.2 Bringing strategy to life?

The discipline of managing an entity from the inception of a strategy to achieving whatever goal defined might be described as an alignment of the different processes. On the backgrounds of the elaborations in the previous section, there need to be a coherency and relevance between strategy, the use of resources, and pertinent indicators capable of giving necessary information of resource impact and outcome (Walsh, 2007). This section will examine different aspects of findings providing information whether this is being achieved by the Norwegian Police or not.

#### 9.2.1 The perception of strategy

The survey seems to support that a majority of the informants perceived what they described as performance indicators to be the actual strategy of their work. Possible causes and consequences of this will be discussed below.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The Norwegian Police have set forth several strategies concerning analytical work, intelligence gathering and what framework of policing is to be applied:

- Perform efficient police-work of good quality.
- Work in a holistic, analytical and targeted manner.
- Work on a long-term and strategic basis. (Politidirektoratet [The Norwegian Police Directorate], 2010e)

Findings from the survey indicate that the previously described performance indicators promote investigatory work by the fact that they are mainly attached and designed to quantify certain aspects of this particular discipline. One of the causes which spurred the development of New Public Management was the perception that investigatory work as an approach of fighting crime was inefficient as the amount of crime surged (Ratcliffe, 2008). The reactive focus driven forth by the indicators seems to have eluded, or at least are being counterproductive to the purpose of this orientation.

A disproportion can be detected in the survey between the emphasis on criminal procedure where one crime is dealt with at a time, and consideration made in regards to safety aspects which is a significantly wider aim. As mentioned in section 6, Ericson & Haggerty put forth that there has been a transition within the judicial system from deviance to risk. Due to the normality of high crime rates, focus has shifted from correcting deviance to managing the *dangers* of it, in other words, risk-management (Ericson & Haggerty, 1997, p. 40).

However, the survey illustrates as presented in section 8.3 "Contingency", that the organization might be more orientated towards "damage-management" than risk-management. Instead of contemplating how to act in order to *avoid* that things go wrong (risk management), the lack of approaches as to what to do when things *do* go wrong, is the focus. Based on the reactive emphasis within the organization, one could say that contingency is a part of the reactive tactical work by necessity. As the findings revealed, the informants expressed the outstanding manner in which the organization performed emergency work. This could be a contributing factor to the existence of contingency.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

While transferred to the strategic work it could be perceived as counter-productive as long as it is not a part of a risk assessment procedure, where multiple risks are compared and subjected to risk treatment as mentioned in section 5.2.1. Observations made by Ericson/Haggerty (1997) seem to corroborate this finding in the survey:

"This manager also believed the administrative rules were not central to police management. He said that many management-level officers preferred 'crisis management rather than long-term planning,' and that he was often left to decide on policy 'because no one else is interested'." (Ericson & Haggerty, 1997, p. 348)

One consequence to this might be the cultivation of "whack-a-mole" tactics; dealing with symptoms of occurring incidents without assessing the risks connected to them, might prevent focus on factors which have the potential to escalate the problem. Higgins (2009) emphasizes this, as he points out that while decision-makers wants to concentrate resources on current problems, it is even more crucial to provide them information on future threats in order to intervene in time (Higgins, 2009, p. 97).

Possible reasons for as to why the Norwegian Police seems to struggle with this element will be further elaborated in section 9.7. However, the illustrated consequences of the described performance indicators seem to suggest that the Norwegian Police has not fully negotiated the transition from deviance to also include risk treatment, as the major focus at ground-level still seem very much focused on individual deviance and criminal proceedings. Avoiding this gap is also underlined by the National Center for Financial Management:

"A risk assessment on the backgrounds of main goals and strategy might uncover that not all risk factors are entailed by the existing performance indicators. Thus, a risk assessment can contribute to assure that the indicators are in fact providing information on all essential aspects which management should be based upon, and also lead to an increase in quality when measuring results." (Senter for Statlig Økonomistyring [National Center for Financial Management], 2006)

Specific findings were done in the survey which further supports this notion; resource allocation is performed case by case and incident by incident. As mentioned previously in this

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

thesis the impression of informant G was that the directions given to him by his managers solely concerned individual cases, and not larger trends or problems. A reactive resource allocation leads to a situation where individual minor pieces of a potential problem are distributed to several different resources. The other way around seem more appropriately if the intention is to work in a strategic manner: allocating resources according to the problem itself and by that attempt to intervene at crime-generating causes. A possible reason for this might be that the focus of the police is "suspect- and evidence driven investigation", which will be discussed in the next section in regards to criminal procedure.

#### 9.2.2 Criminal procedure – "If it's not a case, it's not a problem"

Several of the finding indicate the Norwegian Police needs to redefine its relationship towards criminal procedure if the attempt to make the leap towards a more strategic approach is to be successful.

In the context of investigative work, Maguire describes the approach of "suspect- and evidence driven investigation". He refers to a twilight zone appearing between what the police refer to as *proactive* and *reactive* investigation. Maguire emphasizes that in this zone it is essential to differentiate between *knowledge* and *evidence*. Knowledge entails applying a broader, causally approach to crime, while evidence is proving an incident has occurred and who did it (Maguire, 2008, p. 438). An emphasis on criminal procedure as indicated in this survey might shift resources in the direction of investigation by evidence.

Furthermore, he divides criminal cases into two main categories:

"In summary, then, in 'reactive' investigations of offences reported by the public and allocated to individual detectives, the overall picture found by research comprised two main types of cases: those which involved the alleged offender's identity being handed to the police as it were 'on a plate' by the victim or an eye-witness; and those where the identity of the offender was unknown at the outset and (despite the best efforts of detectives) was likely to remain unknown thereafter." (Maguire, 2008, p. 440)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

A possible consequence of the combination of these two aspects can be that the problemoriented approach suffers, and an arbitrary focus of resources based on individual cases.

The police are meant to solve crimes. However, given how large portion of the police work conducted is investigation, then it might not be surprising how employees perceive the described performance indicators as strategy. It is further possible that this element functions as an accelerator for the other findings in this survey which relates to performance indicators; reactive and fragmented efforts. The latter will be dealt with in section 9.4.

There were, however, identified some cases of problem-driven resource allocation in the survey. This indicates the presence of elements concerning resource allocation with the aim of a long-term effect against series of cases or incidents constituting a problem. One of these findings is worth discussing further in an attempt of identifying reasons as to why resources have been allocated in this manner on the backgrounds of strategy, namely prolific offenders.

Police efforts made against prolific offenders in this survey mainly constituted of keeping profit-driven criminals in custody when possible, and preferably having them incarcerated. The stated reason for doing so is the notion of incapacitating one criminal might lead to the prevention of ten burglaries who he otherwise might have committed. This seems to underscore the use of resources in a preventative manner. As such, the informants perceived this as an investigative proactive approach.

Although not included in this thesis, it might be beneficial evaluating this argument on the backgrounds that this approach not only affects police resources, but also the ones of the courts and penal institutions, in addition to relying heavily on available incarceration capacity at all times. Several Norwegian media have reported on different occasions that the police have been forced to release prisoners due for custody on the grounds of exceeded incarceration capacity. This fact has also been taken note of by the government (Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police], 2009, p. 66).

It might also be reasonable to question parts of the foundation of this approach as being proactive. Maguire (2008) argues that investigation as an objective search for the truth is somewhat misleading:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

"...their main priority is to bring justice to those they 'know' to be guilty of crime (...) this being so, once a person becomes a suspect, he or she is placed into an adversarial relationship with the police rather than one in which the latter seek 'the truth' in a neutral and objective fashion." (Maguire, 2008, p. 435)

Gundhus (2009) also illustrates this point as she describes how prolific offenders are created on the basis of unilateral police databases (p.279). The efforts against prolific offender can bring associations to such "suspect oriented" investigation, where individuals are relentlessly followed up and targeted.

Finstad (2003) makes similar observations in connection to what she refers to as the police creating a "known felon". The intensified control activities a person is subjected to might highlight this person as a problem as opposed to other ones. Furthermore, the suppressive police efforts themselves might be contradictory to the main goals of preventing crime, as individuals being driven further into the prison system also stand a risk of becoming institutionalized. (Finstad, 2003, p. 124).

This might result in a revolving door where the suspect and resources of the judicial system constantly are keeping the door spinning; the suspect is inevitably going to be arrested, claiming the necessary resources. A key question might then be: what stands in the way of being more selective in the approaches applied in crime fighting in order to maximize resources?

One explanation is how the police in Norway historically have been incorporated with the function of prosecution (c.f. section 6.5 and 8.4), and vital management positions have been held by jurists, including the function of police commissioner. As such, it is possible that the entire organization today has a more *penal* perspective at what solutions to choose, than a *problem* oriented one. As this penal mentality has resided within the organization throughout the history of Norwegian Police, it is conceivable that the organization struggles in adopting any other kind of views in how resources should be used.

This impression also came across in the survey. As expressed by informant G when asked if identified problems were dealt with without resorting to the investigative approach, he stated:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

"If there is no case, there is no problem." The prominent position of penology within the Norwegian Police is also found by Gundhus (2009):

"The police officers are trained to and entail as a part of their professional identity, the function of gate keepers making sure that information is passed on into the system of criminal procedure. At the same time they are supposed to prevent *crime*. Already in this nexus between prevention and crime lies a potential significant problem connected to proactive work, due to the fact that police work according to the requirements of the Prosecution is measured by standards of criminal procedure." (Gundhus, 2009, p. 127)

The degree efficiency when applying the criminal procedure approach is commented on by the informants as they expressed an increase in the use of resources and decrease in efficiency due to a development towards heightened quality threshold and complexity of criminal cases. This is also commented on by Ericson & Haggerty in dealing with the knowledge-evidence nexus. They illustrate that evidence emphasizes the use of resources, not necessarily *directly* connected to reducing crime, but due to a constantly increase in requirements to satisfy due process:

"Because the same procedure had to be followed in all criminal cases – no matter whether summary conviction, indictable, or dual procedure offences were involved – fine-grained documentation was required even in the most routine cases." (Ericson & Haggerty, 1997, p. 325)

Even though an emerging problem is identified investigative resources can hardly be redistributed without compromising instructions from the department of prosecution. As mentioned earlier is the basis for these instructions regulated by law (c.f. section 8.4). It must be stressed though, that one of the main functions of both the police and the prosecution is to ensure due process, and the Attorney General upholds this as a vital principle (Riksadvokaten [The Norwegian Attorney General], 2010).

However, it is reasonable to question the perspective the organization has concerning the use of resources connected to criminal procedure on the backgrounds of the previous discussed arguments concerning risk and deviance. If the police are to deal with the much broader

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

phenomenon risk, than ought not investigative resources to be considered as *one* of the risk management tools instead of *the* tool? And are there in fact any consciousness considerations in regards to this topic, or is it the autonomy of criminal procedure of the organization which "sub-consciously" prevents taking on the broader view?

One finding in the survey might indicate that there exists some degree of autonomous drive towards reactive strategies. Both in connection to general resource allocation and problemoriented policing, the informants replied that there were not enough resources to *simultaneously* work reactively and proactively. They clearly displayed a perception that if proactive work was to be done then *added* resources were needed, as opposed to redistributing the existing ones according to the Pareto-criteria.

There could be several different reasons behind this opinion of the informants, for instance a substituting motif for added resources in general. However, this finding also seems corroborated and observed by observations in an article elaborated on in section 6.1 in this thesis, where Andreassen & Gobel describes how the implementation of a new strategy seems to require its own dedicated resources, and that it could be perceived that this implementation thereby is "stealing" resources (Andreassen & Gobel, 2006; Hammerich, 2007).

This thesis has not identified in any regulatory or strategic document that the main approach of the Norwegian Police is to be criminal procedure. On the contrary, for instance in the tutorial "Introduction to problem-oriented policing" by POD reactive measures are a *part* of the intelligence-led approach (Balchen, 2004, p. 13). This leads to the topic of whether or not the police and its resources ought to be so profoundly affected by the prosecution as it seems to be the case today, or even if the two should be incorporated altogether.

A vital part of resource allocation is that management must be in direct control of them. The combination of the seemingly extensive part criminal procedure possesses within the Norwegian Police and how the office of prosecution by law leads investigations, appear to remove large parts of this control away from the professional police managers. As head of an investigatory department stated in the survey:

"The chief prosecutor of this police district has immense power in determining resource allocation, but he doesn't necessarily have the insight to make qualified decisions concerning balancing police operations and investigation." (Informant H)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

In connection to this there seems to be traces of Foucault's view on organizational power as presented in section 6. If the power which resides within an organization is consolidated through its delegation and thereby establishing autonomous routines to ensure further consolidation, than altering the position criminal procedure has in the Norwegian Police seem to be a monumental task.

On the other hand, given the amount of resources which could have been allocated in a more pertinent strategic manner according to problem, this effort might be worth it. This view entails by no means the exclusion of criminal procedure or the supervision of due process, but rather an assessment of the *conditions* which restraints or accelerate the method, which by all standards has been determined to be the *actual* main strategy; risk management.

Aven points out that the conditions which risk management is performed under, can be considered either as measures or restraints (Aven, et al., 2008, p. 68). A regulation by law can be a governmental measure, but a restraint to others. Criminal procedure is a measure within the judiciary system. However, the organizational structure of police and prosecution, as regulated by law and constitutes part of the conditions, appears in some ways to limit the exertion of risk management. Aven further states: "Even though regulations and other requirements constitute important conditions, it might be necessary to consider the possibility of changing these" (Aven, et al., 2008, p. 69).

#### 9.3 The process of identification

Identifying a problem is one part of performing strategic analysis as described by POD in the tutorial "Strategic analysis – knowledge in order to lead":

#### How to identify problem areas?

In order to identify problem areas you should look into the individual areas isolated, and assess them according to the likelihood (frequency) that they will occur and/or the consequences if they do so. For instance, you can look into:

- Volume
- Large percentile shifts
- Severe crime (c.f. penalty ramifications or other consequences)

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

- Prioritized areas (parliament propoitions/Dept.of Justice/Attorney General/POD)
- Focus by media
- Focus by the public
- Political focus
- Elements not dealt with in the central regulations

It is vital that this process is anchored locally as the problems may vary in character in different places. (Politidirektoratet [The Norwegian Police Directorate], 2004, p. 26)

As illustrated in section 8.4.3 the survey revealed that statistics of recorded crime is a determining factor in how crime is identified within the Norwegian Police. This corresponds to the criteria of volume as mentioned above. There are good reasons for using these types of sources as recorded statistics can provide invaluable historical information which is a crucial element of the risk management foundation (Aven, 2007, p. 17). In order to predict risk and apply treatment accordingly, gathered information concerning stabile factors over time, can allow for the detection of patterns.

However, the survey also revealed that these statistics constituted the largest part of the informant's information basis. There are several aspects which make such statistics unreliable as tools for identification when applied unilateral. This will be discussed further in section 9.7, but one classic critique to such statistics is that they do not necessarily identify the most urgent problem, but could rather be an expression of the public's inclination to notify the police (Maguire, 2007). If the public has a perception of the police not acting upon the information provided by them, than the motivation to make future reports might suffer. This leads to the core of some potential conflicts identified through the survey, dealing with the intersecting interests of central government, local police and the public.

The previous mentioned tutorial stresses that the process of identification ought to utilize diverse sources, and that local anchoring is imperative. Several informants clearly stated that crime statistics are inherently unreliable in their line of work. Although, they felt that some trends could be derived from them, especially profit driven crimes on the account of insurance claims which requires making a report to the police.

Furthermore, a few informants stated that the unreliability of these statistics led to a reluctance among police managers to communicate them to other cooperating agents, such as municipal authorities. As the numbers were produced and harvested by the police, they also

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

became a police property and by this mechanism denying others access. One expert informant had an impression that there existed a fear of alarming the public if these numbers were made public.

One possible explanation of this reluctance to give access to unprocessed data can be found in the notion of the police being communicators of risk, as they give advice to the community concerning different matters of risks. Although, these advices are based on the *abstract* knowledge which resides within each police officer: "Abstraction allows continual redefinition and defense of problems and tasks, and securing of new tasks (Ericson & Haggerty, 1997, p. 73)."

As such, the police insist on having some control over the information by being the mediator, not just the producer and provider. Nevertheless, this has the potential to somewhat hamper the opportunity local informants have to verify the assessments made by their local police in the identification process.

When corroborating different findings in the interview analysis a pattern emerged which indicated that the identification process consisted of a dynamic process between reviewing the crime statistics, and conferring to the prioritized crime categories set forth by the Attorney General. No other significant element to the identification process itself was found.

A potential consequence of this dynamics is that the central priorities might be perceived as guidelines as to what to look for, instead of letting the area itself be the principle source of identification. A possible affect of this is that indications of *unknown* constellations of *known* crime generating factors might go unnoticed and be the source of produceing future problems:

"On the face of it, the concept of 'unknown unknowns' is a logical fallacy. And yet there is a sense in which the concept of 'unknown unknowns' has value in practice. Law enforcement has encountered emerging threats which it did not anticipate nor recognize as a knowledge gap until the problem had become established." (Higgins, 2009, p. 85)

The survey indicated that central priorities *were* perceived as such guidelines. As such, there is another side to this aspect which emerged from the survey, which potentially have a more profound consequence to the relationship between the police and the public. The conflict

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

occurs when urgent local problems conflict with urgent central priorities, as instructions given from the Attorney General is given crucial emphasize by the local police.

Furthermore, when corroborated with other findings it appears that this decision concerning what to emphasize is made without the participation of local parties. As shown in section 8.4.3 only one informant stated municipal authorities to be a source of problem identification.

If one is to view police resources as a common good, this conflict might be a democratic problem as the parties affected by a problem effectively do not have a say in how police resources (or at least a part of them) are to be used. A second consequence might be that an opportunity for a potential synergy-effect between police and local resources are being missed.

This friction between central and local considerations also seems supported by other findings. Department manager Erling Børstad at POD stated that several conflicts which were registered as local challenges were set aside because of central instructions. One example referred to was how environmental protection suffered as opposed to more traditional crime. Another example have been the open conflict in Oslo were the municipal wants to establish their own patrolling police to increase street-safety, as they feel that the existing police (which is a part of the governmental body) do not respond to local needs ((NTB), 2003).

Another finding in the survey which further seems to corroborate this view is the police manager's attitude towards problem-oriented policing as described by the informants: The method is OK as long as it doesn't cost anything. The mentioned aspects are well advised to be assessed on the backgrounds that POP heavily emphasizes and relies on third party involvement. The identification process as it comes across in this survey negates this part of the model as third parties *effectively* have little or no influence over where to focus police resources.

The situation as it appears today is that the police provide abstract information based on somewhat unreliable unilateral sources to third parties as to where they can focus *their* resources. This also contradicts the intention of the police councils as stated by POD:

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

"Local police authorities will see to that the municipal and other relevant partners are invited to give their say in the planning of the police work. Local requests and needs should as far as possible be reflected in the activity plans of the police." (Politidirektoratet [The Norwegian Police Directorate], 2007a, p. 13)

This view is further supported by statements made by police detective inspector Nålsund, who believed that the only way to rectify this is to give the police council official mandate over resources which the participating parties reside over.

#### 9.4 Prioritizing – a contradicting exercise?

As the identification provides a basis for determining priority between problems discovered, the two processes are closely connected (Politidirektoratet [The Norwegian Police Directorate], 2004). Thus, they are also vulnerable to procedural errors; a flaw in the first process has ramifications further down the line. Setting priorities without having a complete picture, can result in an isolated reasonable outcome, but assessed alongside the actual surroundings might lead to a misplacement of resources.

Central priorities proved in the survey to bring consequences; not only affecting identification, but also how problems were prioritized as these instructions were perceived as a message to basically prioritize everything. This in itself disqualifies the process from being an actual prioritization. By definition giving priority means discriminating between targets; giving focus to one problem at the expense of others.

One explanation for this might be the foundation on which police managers make priorities; it is deemed as *too* uncertain by them. As illustrated, several informants had a clear perception of the vulnerability of crime statistics, despite it being one of the few main sources for information. Aven (2007) states that risk-management implies by definition taking such uncertain decisions. However, prioritizing the allocation of the society's common resources based on an unreliable source is understandably not a venture any police manager wants to undertake without some degree of unease.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Still, resources must be distributed by some criteria. Statements made by informant H, being a department head of investigation, indicated that making priorities according to the central guidelines provided him and the police station with a "clear back" in the case of any objections to them. Thus, the central priorities seem worked as a welcomed "alibi" which justifies the given priorities.

Observations made by Golding & Savage seem to corroborate this view, as local requests seem to suffer when central priorities combined with crucial performance indicators becomes the main tenet of the local police (Golding & Savage, 2008).

Another consequence due to the lack of valid prioritization is neglecting the perspective of societal harm. Prioritizing according to this perspective could mean altering this process from a political one to a practical and *protective* one. On these backgrounds resources are focused by assessing them according to risk and the potential to inflict harm onto society, in addition to form and degree of harm (Ratcliffe, 2008; Tusikov & Fahlman, 2009).

The integration of Italian organized crime into crucial societal functions could serve as an example of this, as they are able to grind cities to a hold by closing down garbage transport which they control. The survey indicates that the societal-harm perspective to some degree is neglected by Norwegian Police, but not ignored. The inclination of the organization towards reactive approaches might be an explanation as to why the harm-perspective is not applied in its daily work, as resources are mainly allocated case by case.

However, interestingly enough, the pattern that emerged from the survey showing the informant's satisfaction in the emergency capabilities of the Norwegian Police, also uncovered that harm-based priorities are performed in relation to patrol duty. Police presence according to geographical hot-spots for instance in relation to violence, was a main driving force for resource allocation in the week-ends. Bringing this approach up onto a strategic level seems on the other hand to have been less successful, given the central — local disproportion.

Fragmented efforts were identified to be one of the main ramifications to this conflict. In an attempt to give priority to everything, resources are scattered across the different categories of crime following up incident by incident to "harvest the numbers". There has been pointed to several other methods in measuring the impact of police efforts, as opposed to the traditional

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

methods where a fall in reported crime and a rise in clearance rates is looked upon as a success.

A valid prioritization of problems allows resources to be focused, and thereby evaluating the effect on the backgrounds of *disruption* (Tusikov & Fahlman, 2009). This term refers to an attempt in identifying the significance of police intervention; taking out the leader in a criminal hierarchy might only open up to ambitious new recruits, having no effect on the problem. As such, a questionable prioritization might lead to a pertinent disruptive effect being missed.

This thesis does not argue that the priorities given by the NAG is irrelevant as they address serious criminal offences. However, it is argued that this approach hampers resource efficiency if used as the only manner of strategic prioritization. This derives from the fact that these instructions are annuals and therefore by nature cannot claim to reflect the landscape of crime. Thus, there seem to be a need for developing a clearly set of defined structures to give priorities by (Tusikov & Fahlman, 2009). Golding/Savage (2008) further comments on this:

"Indeed, the possible perverse effects of the current arrangements were alluded to by HMIC itself (Her Majesty's Inspectorate of Constabulary), when it identified in its inspection of performance management in 2007 that 'some forces focus resources and processes unduly on obtaining high gradings in HMIC and PPAF assessments', at the expense of local priorities (...) In that context the need to prioritize limited resources will perhaps inevitably be influenced by the performance assessment of the framework." (Golding & Savage, 2008, p. 752)

#### 9.5 Substituting means for ends

As presented in sections 8.4.1 and 8.4.2 informants conveyed an impression that performing well according to the described performance indicators did not necessarily mean that the organization steered in the direction of its main goals. Several informants made direct statements regarding statistics becoming the actual goal, and not the problem at hand. A possible challenge to this is how monitoring performance might become the source of goal displacement by measure fixation (Manning, 2005; Ratcliffe, 2008). Various outcomes of this might be tunnel vision and poor validity (Ratcliffe, 2008).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

To deal with the latter first; validity in the context of performance indicators entails whether or not they are suitable to inform if a strategy is working, failing or being counterproductive; "are you measuring what you think you are measuring?" (Kvale, 2006, p. 166). This problem became tangible and well illustrated in the NGA's annual circular of 2010. It was brought to his attention that single narcotic offences were being duplicated where one arrest of possession results in two cleared cases; possession and acquisition of drugs (Riksadvokaten [The Norwegian Attorney General], 2010).

A possible motif for this could be to achieve an overall higher clearance rate which might communicate to the surroundings that "the strategy is working". This could be a source of motivation within the organization for allocating resources to affect indicators, as opposed to a more knowledge-driven approach.

Tunnel vision refers to managers knowingly or inadvertently focusing on selected performance indicators while potential identified problems are being ignored. It seems conceivable that this phenomenon might be connected with findings in the survey regarding the cost and complexity of criminal cases. A heavy burden case will most likely be damaging to the processing time and completion of already existing cases. If a manager adopts this perspective he or she might be tempted to concentrate resources on maintaining status quo on the indicators, and avoid taking on new identified problems.

This particular perspective on resource allocation can be illustrated by a case in Bergen in 2008, where information concerning 500 grams of heroin was not acted upon. The article unveiled that a department manager allegedly gave instructions to his police officers not to intervene, as his department was not able to handle a case of this magnitude at the present time (Bergens Tidende, 2008). Without discussing the specific incident, it is clear that the article illustrates an example of tunnel vision as a phenomenon. This might pose a potential serious threat to how the police perceive and perform risk treatment, as risk assessments are solely being performed on the basis of performance, and not keeping the main goals of the organization in mind (Golding & Savage, 2008).

To conclude this topic, it might be beneficial to take note of the essentials of goal displacement in relation to the described performance indicators; as mentioned, they are all quantitative. Goal displacement is therefore likely to also imply ignoring the quality behind

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

the indicator scores. As long as ten investigators making a major disruption to a criminal network achieves the same one notch in the belt as the one investigator solving a bicycle theft, quantity seems to be an arbitrary approach.

#### 9.6 Keeping up with resource accountability

The term "resource accountability" is a construction of this thesis and refers to different tools and measures which enable managing resources, and contributes to the assessment of the outcome. The importance of such accountability is directly connected to the definition of resource allocation. As long as a resource is limited, one has to be able to assess whether the exploitation versus production ratio is satisfactory, or could be improved in any way. Keeping track of resources is vital in this assessment. This aspect also falls naturally under the discipline of risk management as the model seeks to maximize benefits at a minimum use of efforts (Denney, 2005).

The findings identified an inability to continuously keep track of costs in relation to individual criminal cases, and this seems to hamper creating a full picture of the overall allocation. It is not argued that cost-benefits assessments should determine whether a case is worth investigating or not, but they could be of assistance in strategic thinking should management wish to alter resources in order to for instance emphasize disruption as opposed to clearance rates. Structured assessments anchored in amongst others cost-benefit perspectives might enhance the function of resource accountability, while at the same time focus resources onto problems (Flood & Gaspar, 2009).

Ratcliffe (2008) states that there are two types of evaluation: *outcome* and *process*. The outcome evaluation focuses simply on what the end-result of an effort was. The process evaluation, however, can tell something about why it worked or failed. A study conducted in the United States indicated that some 93% of an investigator's time is spent on activities not directly related to solving reported crime (Greenwood, Chaiken, & Petersillia, 2005). A costbenefit assessment might be a *starting point* as to evaluate the efficiency of efforts regarding a problem.

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

The cost-benefit assessment attempted by the survey focused on criminal procedure. Some informants illustrated this challenge as they expressed a lack of control over costs in criminal cases. An incentive for examining this aspect is connected to the fact that performance is expressed in quantity defining an outcome, and not quality. Even though cost-benefit also is a quantifiable entity it might in fact provide information on where the threshold of quality lies; whether the resources involved in the process was a sensible choice given the outcome, or if the process could have been more efficient without deteriorating quality.

In order to benefit from this it seems imperative to incorporate into strategy that funding should follow the problem, as opposed to individual cases. Thereby ensuring that the management becomes in control of costs, instead of them perceiving that the case itself is in control or rather out of control.

Regular cost-benefit assessment might provide a template assisting in identifying factors accelerating costs compared to what the police try to achieve regarding a problem. One identified cost-accelerator in the survey is the increasing numbers of foreign nationals being arrested who requires interpreters. Informants did not see any signs of this trend receding. This might eventually compel asking precisely the question whether funding should follow individual cases thereby endanger promoting the "whack-a-mole" approach (Ratcliffe, 2008), or problems as a bigger entity.

Furthermore, several informants questioned the lack of specific performance indicators able to provide *qualitative* information concerning their work. Gundhus (2009) made observations concerning the resistance to POP among police officers, identifying that one reason for this was the lack of confirmation that their effort was making a difference. This type of information also seem beneficial to managers as well. It is therefore noteworthy that police work performed by Norwegian Police, being highly qualitative by nature due to its extensive interactions with the public, lacks such accountability tools.

An example of this is illustrated by statements made by some of the informants, concerning accountability of patrol resources. They indicated that patrol resources are in a very little degree managed in a structured manner besides responding occurring incidents. An on-scene commander stated that if there were any guidelines affecting this type of resources, than these constituted of personal involvement and interests of each police officer. The result being that

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

this resource is somewhat unfocused. These findings seem to be corroborated with the observations of patrol duty made by Gundhus (2009) and Finstad (2003).

As a result, the affecting factors were random commendations from management particularly in connection with narcotics related arrests spurred by personal interest of the police officers, while police officers going in another direction received less attention. To some extent this seemed to be accepted within the organization.

Other informants argued that "preventive patrolling" in itself was a work form and thereby fulfilling the accountability requirement. However, this kind of patrolling have proved to have a very local effect, if any at all (Ratcliffe, 2008; Tella & Schargrodsky, 2004). If preventive patrolling is the work form adopted in between responses, than this finding seem to indicate the need for a more structured accountability tool *if* this resource are meant to be exploited in a higher degree than today. As a backdrop to this element, it can be mentioned that only one central performance indicator exists in connection to patrol duty within the Norwegian Police, this being number of controlled vehicles.

On the other hand, the importance of maintaining emergency capabilities of patrol resources cannot be neglected. The government has emphasized the readiness aspect of such resources, which could convey a somewhat ambiguous message to this service. These resources are primarily trained to deal with emergencies and an alteration of this focus could be perceived as using a resource in a manner not intended.

#### 9.7 "A good decision is based on knowledge and not on numbers"

The person behind the statement in the headline of this section was Plato. The statement is not used because Plato said it. It is used because it is a *good* statement and relevant as far as the analytical framework of the Norwegian Police is concerned. This statement seems to entail the essential aspects identified in this survey concerning the ability of this organization to work according to the strategy it has decided upon.

Furthermore, it expresses in many ways the essence of the DIKI-continuum; knowing the difference between data and knowledge and more important, deciding on putting resources

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

into action based on the sequence of the continuum (Ratcliffe, 2008). Aven (2008) emphasizes how the harvesting of information by different types of analysis can increase the level specific knowledge, thereby reducing the uncertainty surrounding making a decision (Aven, et al., 2008, p. 76). Nevertheless, this uncertainty can never be eliminated.

Establishing a working analytical framework is essential to resource allocation, as it allows managers to make decisions on an up to date basis as possible in addition to enabling the organization to operate on a strategic level (Tusikov & Fahlman, 2009). The bigger the size of an organization, the more urgent these aspects are as resource management calls for predictability and early warning.

A particular challenge to Norwegian Police in this respect has been crime crossing the borders between police districts. One example of this was a sexual offender who was indicted for 67 cases of sexual assaults towards minors in several different districts, over a period of over 20 years. Numerous reports were made by the public without the police being able to spot the pattern. As this survey indicates that resource allocation is performed case by case, this example illustrates the need for an analytical function in order to facilitate early warning of *problems*. The poor performance or even lack of such a function seems to make the ramification of this type of allocation even greater, as the organization struggles to eliminate the problem itself (Riksadvokaten [The Norwegian Attorney General] & Politidirektoratet [The Norwegian Police Directorate], 2010).

The survey also indicated that decisions on how, where and when to use resources are still being made on the basis of numbers, being the rise and fall of crime statistics. The Norwegian Police have adopted a knowledge-driven strategy as it has acknowledged the limitations of reactive police work (Balchen, 2004). This acknowledgement is by no means to be underestimated in importance, as it provides an invaluable backdrop when assessing the state of the entire organization dealing with crime-fighting.

However, findings seem to indicate that the front-line managers of the organization are more concerned with maintaining status quo, than to facilitate the implementation of this knowledge-driven strategy. A consequence might be that the traditional allocation of resources is solidified and new perspectives on this discipline are prevented. Although, it must be stressed that there were by no means found any indications in the survey this being the

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

result of malice or obstruction. The question is then why managers are inclined to maintain status quo?

As there are no structural incentives to break off with the current resource allocation, the findings seem to coincide with the mechanisms described by Aven (2008) referred to in section 6.5. As long as the basis for performance is numbers, the degree of "success" that follows a decision becomes very visible and tangible to the surroundings. Combined with a situation where qualitative information that might explain the variations in numbers is less emphasized as a managerial tool, a manager might have a hard time justifying an alteration of resources. Managers might develop an aversion to loss, and the primary concern of a decision is obtaining steady numbers (Cope, 2008). This might create a rigid perspective on resource allocation as the mandate for doing so is not wide enough compared to the potential loss.

On the other hand, relying on analysis can also be a risky business. As pdi.Nålsund expressed in section 8.5.1 the analytical approach of the Norwegian Police in his mind, consists of police officers applying personal experience to explain the recorded numbers. It must be stressed, however, that such experience is an invaluable asset when creating recommendations to resource allocation. As recorded data, it provides a historical foundation for comparing different tactics.

Nevertheless, developing analysis based on unilateral sources assessed only according to own experience or the ones of colleagues, is a serious breach in how to conduct social analytical research. This view seems to be corroborated by observations made by Gundhus (2009) as she comments on the lack of social scientific approaches within the analytical work performed, as well as the extensive use of unilateral sources. This perspective might also, in a pervasive way, justify the institutionalized decisions of front-line managers as there seem to be fewer and fewer reliable options for a manager to obtain a qualified basis for his decision.

Knowing that crime statistics are inherently unreliable and vulnerable to factors beyond the control of the police, the manager may turn to the police officer in charge of crime analysis in order to make a more qualified decision. Realizing that this police officer in fact solely uses the same unreliable sources, only applying personal experience in order to make sense of them, it is difficult to blame the manager for turning away from this approach (Evans, 2009). Most decisions have a time-limit to them and being under pressure, the manager opts for the

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

one approach left; seeking to cover his back by anchoring the decision in central instructions, maintaining status quo of resource allocation.

Comments in an audit conducted by POD also seem to support this view. It points out that analytical functions are unclear and there is a need for a more structured analytical and intelligence process. In addition it states that the quality of the analytical work being conducted varies too much (Politidirektoratet [The Norwegian Police Directorate], 2010b).

This points to a crucial element if crime analysis is to be used as a basis for allocating resources; *function* does not necessarily entail *competence*. Interestingly enough a poor analytical product might not only be the reason for why managers do not use them, but certain aspects indicate the possibility of such products being yet another mechanism in maintaining status quo.

Innes, Fielding & Cope (2005) illustrates this when they question what this thesis assumes to be the *reliability* and *validity* of the analytical process, as they refer to a "scientification of policing" in relation to police performed analysis (Innes, et al., 2005, p. 39). As far as the contents of these two concepts are concerned it is referred to section 7.5 in this thesis.

Due to the unreliable nature of crime statistics, observations were made that these flaws in the various analytical products "are routinely compensated for and 'glossed over' by analysts" and missing pieces are filled in according to the analysts' criminal experience (Innes, et al., 2005, p. 50). This seems to further support the previous argument concerning manager's distrust in analytical products.

Nevertheless, as this *perceivably* increases the reliability and validity of the product, it is conceivable that the products itself contributes to maintaining status quo. Particularly as the product is distorted in directions of the analysts' predispositions (Grønmo, 2007, p. 221). Given the indications of police officers being inherently focused on criminal procedure, it might be hard to find incentives for using resources otherwise in an analysis produced by a police officer, as opposed to a social scientist with a different perspective. As such, police produced analysis might knowingly or inadvertently justify the present approaches.

Aspects of this seem to be illustrated by observations made by Gundhus (2009). She points out that adopting a "knowledge-centered" strategy within the Norwegian Police not

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

necessarily has led to the primary objective of more proactive police efforts, but has rather functioned as a cathartic process where the *penal* function of the police is the outcome (Gundhus, 2009, p. 237).

The need for diverse competence when conducting crime analysis of seems to be underscored by the finding illustrated in section 8.4.3 concerning unilateral information sources.

Introducing competence and approaches adopted from social science might be called for, as this approach differs from the mentality of police officers who tend to be more action oriented.

In this respect, one factor which separates the role of the analyst and police officer is the task of making recommendation (Cope, 2008). As the analyst makes these on the basis of context as opposed to being action oriented, they can end up recommending not using resources onto a problem where the police officer would. Performing a genuine assessment concerning the allocation of resources will inevitably put managers into situation where one of the options contradicts the opinions of police officers. By doing so Higgins points to the fact that decision-makers need to be skilled in understanding and assessing an analytical product (Higgins, 2009, p. 201).

In relation to the organization of the Norwegian Police, a second dimension is added to this argument as to who the decision-makers are. As illustrated before the department of prosecution has a significant influence over resources. This poses a challenge as to which extent the organization decides analysis are to act as basis for decisions; do they also entail prosecution and what attitude do this department have towards crime analysis? As the intelligence-led approach emphasizes the degree of disrupting crime (Cope, 2008), this could mean disregarding some cases in favor of others (Tusikov & Fahlman, 2009), conflicting with instructions made by NAG.

A final potential problem which might contribute to weaken the intelligence-led approach is how information technology has dramatically increased the capacity of the police to store information. This problem derives from the misconception of "knowledge" being mistaken for "information" resulting in an information overload; no discretion are applied in the information gathering and all gets registered "just in case", straining analytical resources (Gundhus, 2009; Innes, et al., 2005).

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

Thus, retrieving information for targeted use becomes a task consuming resources on its own. Without a competent analytical function it is impossible for front-line managers to orientate themselves at the same time they are contemplating on a decision, and chances are they fall back onto statistics and personal experience (Ratcliffe, 2008).

#### 10 Conclusion

The resource allocation within the Norwegian Police seems to be a contradiction in terms. The strategies adopted clearly calls for the police being strategic and proactive, however the built-in mechanisms of the organization ensure that any attempts of this suffers a continuous relapse. Though there are examples of the police incorporating elements of both disruptive measures and taking on a risk perspective, these cases seem to be isolated and the problem is not always assessed alongside other identified problems. This keeps manpower in a cycle where the resources are difficult to redistribute because the approach itself calls for more repressive measures, effectively incapacitates the police from doing something with the actual problem.

The historical influence by the public prosecutors within the police is difficult to ignore when explaining this particular mechanism. Any further discussion regarding converting the Norwegian Police into a more strategic and proactive organization cannot be conducted without scrutinizing the relationship between the police and the prosecution. Disseminating and mapping the actual structure of power and influence in this relationship, in addition to its consequences, are critical topics this thesis did not have the opportunity to pursuit further, but are areas in need of further research. Who is appointed to manage the Norwegian Police and why, who claims to manage the Norwegian Police, and who is in fact managing the Norwegian Police?

Presumably, the political level within Norwegian criminal politics is understandably reluctant to surrender the delegated and thereby integrated mechanisms of control a system of criminal procedure entails, echoing some Foucaultian tenets of organizational power. Neither does this thesis argue that elevating the perspective from criminal procedure should in any way imply less police accountability. It rather needs to be developed *additional* forms of accountability which are able to incorporate the elements of risk management on all levels. What these approaches should be is another topic for scrutiny, although it seems clear that they do need to incorporate *qualitative* assessments.

One of the main aspects of the survey indicate that fueling the organization with more resources seems futile as long as the use of existing resources is not thoroughly and *openly* dealt with by the organization and the stakeholders of crime. One of the pillars of the adopted

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

strategies of the police is "value for money"; the most result for least effort. If the police by the concept "problem-owner" demand that the public in larger degree takes part in the challenges being dropped on the local police force, than it might seem appropriate that the public has the right to promote their own demand; "if we are suppose to apply our resources onto a problem, we want to know how you apply yours". This does not mean the police should be managed by the public, its role in having monopoly on the use of force is vital in a democracy.

It is possible to have a substantially more disclosure of how existing resources are used in order for the tax payers to form an opinion whether new ones should be added, without breaching any form of confidentiality or occupational secrets. This seems vital so that the problem-owners in fact have a fair chance of assessing their own risks. A problem that is left unattended by the police for some reason needs to be communicated, and not swept under the rug. Although, the main reasons for this information not being communicated seem to be identified to some extent by this survey.

There is a need for better resource accountability in regards to cost-efficiency and how human resources are allocated, in order for the police to communicate how resources are used in the first place. If the police are supposed to work strategic, than a comparative basis for how resources are used is needed. This seems crucial in order to assess the exploitation of resources according to problems. Establishing this can be a vital contribution in providing information whether "value for money" is achieved or not.

The road ahead to a better exploitation of common resources need not be that far. There is already commenced an implementation of police counsels throughout the police districts. This forum is meant to be a regular meeting point between the police and municipal authorities, where common efforts against crime is meant to be the outcome. If the police eventually decide to establish a genuine risk-management framework, than these counsels seem to be one of the main keys in accomplishing this. If so, at least two factors need to be in place, and these are also induced and corroborated by informants.

First, there must be a competent analysis unit, and even more crucially, its position in the framework cannot be coincidental. This unit should not only serve the police, but the principal stakeholders of the entire community. Two aspects can be achieved by this; the level of

Master thesis submitted by Åge Dyrøy in Masters of Police Science at the Norwegian Police University College

independent and unbiased analytical products can be significantly raised, and as the "orders" for these products come from different directions, the products can be multi-sourced as access to information might be given easier given the "quid pro quo".

Second, the counsels must be given a clear mandate to in fact allocate existing resources from all of the participating parties. It does *not* mean that the police can dictate for instance municipal resources, but it *does* mean that the counsel decide *what, where* and *when,* while each professional participant decides *how*. This seems to ensure a common understanding of problem and priority, while maintaining professional integrity in the measures being applied.

A topic in need for further examination is the lack of an evaluation of the implementation of problem-oriented policing within the Norwegian Police; an urgent evaluation hopefully to come in the future. This thesis had not the capacity to exclusively examine these questions. It must be stressed that this implementation not only needs to be evaluated, but also researched upon. This seems imperative to distinguish between, as the latter will apply a different approach in examining the topic. A research might for instance reveal structural causes in an objective way that go beyond what a report of an evaluation is able to, especially if this being a report made by employees of the organization.

The Norwegian Police seems to be caught between intending to work strategic and proactive on a superior level, and the performed work on ground level which heavily relies on processing case by case according to criminal procedure. Being in this "twilight-zone" seems significantly more damaging than if one were to make a clear decision in what end of the spectrum the police ought to be; a pure responsive task-force, an agency capable of *managing* risks to society or an organization which covers the whole spectrum. As of today, the organization seems to have its head in the strategic end, while its hands and feet are in the opposite reactive end not being exploited the way intended.

#### References

- (NTB), A. (2003). Byrådet i Oslo vil ha kommunalt ordenspoliti [Oslo city counsil calls for municipal police] Retrieved 12.03.11, 2011, from www.aftenposten.no/nyheter/oslo/article500032.ece
- Andreassen, M., & Gobel, B. N. (2006). Risikostyring i Staten [Governmental risk management]. Internrevisoren(1), 9-13.
- Aven, T. (2007). Risikostyring [Risk Management]. Oslo: Universitetsforlaget.
- Aven, T., Boyesen, M., Njå, O., Olsen, K. H., & Sandve, K. (2008). Samfunnssikkerhet [Societal safety] (2nd ed.). Oslo: Universitetsforlaget.
- Balchen, P. C. (2004). Innføring i problemorientert politiarbeid [Introduction to problemoriented policing]: Politidiraktoratet.
- Befring, E. (2007). Forskingsmetode med etikk og statistikk [Research method with ethics and statistics] (2nd ed.). Oslo: Det Norske Samlaget.
- Bergens Tidende (2008). Stoppet ikke heroinpakke [Did not stop shipment of heroin]
  Retrieved 15.03.11, from www.bt.no/nyheter/lokalt/Stoppet-ikke-heroinpakke-64117.html
- Christopher, S., & Cope, N. (2009). A practitioner's perspective of UK strategic intelligence. In J. Ratcliffe (Ed.), *Strategic Thinking in Criminal Intelligence* (pp. 235-248). Sydney: The Federation Press.
- Clegg, S. (1998). Foucault, Power and Organizations. In A. McKinlay & K. Starkey (Eds.), Foucault, Management and Organization Theory: From Panopticon to Technologies of Self (pp. 29-49). London: Sage Publications.
- Cope, N. (2008). "Interpretation for action?": definitions and potential of crime analysis for policing. In T. Newburn (Ed.), *Handbook of Policing* (2nd ed., pp. 404-430): Willan Publishing.
- Denney, D. (2005). Risk and Society. London: Sage Publications.

- Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police] (2004-2005). Stortingsmelding 42: Politiets rolle og oppgaver [Parliament audit no.42: The role and tasks of the Police].
- Det Kongelige Justis- og Politidepartement [The Norwegian Department of Justice and Police] (2009). Stortingsproposisjon nr.1 2009-2010 [Parliament proposition no.1 2009-2010].
- Eide, H.-P., & Nagell-Erichsen, H. (2007). Status for risikostyring i Staten, sett fra Senter for Statlig Økonomistyring [Status in governmental risk management as seen from the National Center for Financial Management]. Internrevisoren(1), 20-22.
- Ericson, R. V., & Haggerty, K. D. (1997). *Policing the Risk Society*. Toronto: University of Toronto Press.
- Evans, R. M. (2009). Influencing decision-makers with intelligence and analytical products. In J. Ratcliffe (Ed.), *Strategic Thinking in Criminal Intelligence* (pp. 187-204). Sydney: The Federation Press.
- Finstad, L. (2003). Politiblikket [Loosely translated: The police discretion] (pp. 124-127). Oslo: Pax Forlag A/S.
- Fjelland, R. (2005). Innføring i vitenskapsteori [Introduction to the theory of science] (5th ed.). Oslo: Universitetsforlaget.
- Flood, B., & Gaspar, R. (2009). Strategic aspects of the UK National Intelligence Model. In J. Ratcliffe (Ed.), *Strategic Thinking in Criminal Intelligence* (pp. 47-66). Sydney: The Federation Press.
- Gillespie, J., Sicard, A., & Gardner, S. (2007). Designing performance management systems for Australian policing. In M. Mitchell & J. Casey (Eds.), *Police Leadership and Management* (pp. 167-177). Sydney: Federation Press.
- Golding, B., & Savage, S. P. (2008). Leadership and performance management. In T. Newburn (Ed.), *Handbook of Policing* (2nd ed., pp. 725-760): Willan Publishing.
- Greenwood, P., Chaiken, J. M., & Petersillia, J. (2005). The Investigative function. In T. Newburn (Ed.), *Policing: Key Readings* (pp. 247-261): Willan Publishing.
- Grønmo, S. (2007). Samfunnsvitenskapelige metoder [Social science research methods] (2nd ed.). Bergen: Fagbokforlaget.

- Gundhus, H. (2009). For sikkerhets skyld [Loosely translated: Being on the safe side): UniPub.
- Hammerich, M. (2007). *Problem orienteret politiarbejde når tjenesten tillader det*. Paper presented at the Policing in Scandinavia.
- Higgins, O. (2009). Theory and practice of intelligence collection. In J. Ratcliffe (Ed.), *Strategic Thinking in Criminal Intelligence*: The Federation Press.
- Innes, M., Fielding, N., & Cope, N. (2005). "The Appliance of Science" The theory and practice of Crime Intelligence Analysis. *British Journal of Criminology*, 45, 39-57.
- Kemshall, H. (2003). Understanding Risk in Criminal Justice: Open University Press.
- Kleiven, M. E. (2005). Where's the intelligence in "The National Intelligence Model"?, University of Portsmouth.
- Kvale, S. (2006). Det kvalitative forskningsintervju [The qualitative research interview] (9th ed.). Oslo: Gyldendal Akademisk.
- Maguire, M. (2007). Crime Data and Statistics. In M. Maguire, R. Morgan & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (4th ed., pp. 241-302). Oxford: Oxford University Press.
- Maguire, M. (2008). Criminal investigation and crime control. In T. Newburn (Ed.), *Handbook of Policing* (2nd ed., pp. 430-465): Willan Publishing.
- Manning, P. K. (2005). The Police: Mandate, Strategies and Appearances. In T. Newburn (Ed.), *Policing: Key Readings* (pp. 191-215): Willan Publishing.
- Mitchell, M. (2007). Evidence-based policy and practice in Police management. In M. Mitchell & J. Casey (Eds.), *Police leadership and management* (pp. 75-89). Sydney: Federation Press.
- Newburn, T. (2008). The future of policing. In T. Newburn (Ed.), *Handbook of Policing*: Willan Publishing.
- Norsk Offentlig Utredning [Norwegian Public Audits] (2000). Skattlegging av petroleumsvirksomhet [Taxation of petroleum enterprises].
- Oxford Dictionary of Geography (2004). Retrieved 08.03.2011, 2011, from www.answers.com/topic/resource-allocation

- Politidirektoratet [The Norwegian Police Directorate] (2002). Strategiplan for forebyggende politiarbeid 2002-2005 [Strategyplan for the preventive policework 2002-2005].
- Politidirektoratet [The Norwegian Police Directorate] (2004). Strategisk analyse kunnskap for å lede [Strategic analysis knowledge in order to lead].
- Politidirektoratet [The Norwegian Police Directorate] (2007a). Formalisert samarbeid mellom kommunale myndigheter og Politiet [Formalized cooperation between municipal authorities and the Police].
- Politidirektoratet [The Norwegian Police Directorate] (2007b). Nasjonal strategi for etterretning og analyse [National strategy for intelligence and analysis].
- Politidirektoratet [The Norwegian Police Directorate] (2008). Politiet mot 2020 [The police towards 2020].
- Politidirektoratet [The Norwegian Police Directorate] (2010a). Driftsanalyse av politi- og lensmannsetaten perioden 2002-2008 [Operational analysis of the Police in the period 2002-2008].
- Politidirektoratet [The Norwegian Police Directorate] (2010b). Etatsledelse og tilsyn årsrapport 2009 [Loosely translated: Agency management and supervision annual report 2009]: Politidirektoratet.
- Politidirektoratet [The Norwegian Police Directorate] (2010c). Kommenterte STRASAK tall 2010 [Commented STRASAK numbers 2010]: Politidirektoratet.
- Politidirektoratet [The Norwegian Police Directorate] (2010d). Politiets nasjonale innbyggerundersøkelse 2009 [The national citizen inquiry by the Police 2009]. Oslo.
- Politidirektoratet [The Norwegian Police Directorate] (2010e). Politiets strategi 2010-2015 [The strategy of the police 2010-2015].
- Politidirektoratet [The Norwegian Police Directorate] (2010f). Virksomhetsstyring [Loosely translated: Enterprise management].
- Påtaleinstruksen [The regulation of prosecution] (2009).
- Ratcliffe, J. (2008). Intelligence-Led Policing: Willan Publishing.
- Riksadvokaten [The Norwegian Attorney General] (2010). Mål og prioriteringer for straffesaksbehandlingen i Politiet 2010 [Goals and priorities for criminal proceedings within the Police 2010].

- Riksadvokaten [The Norwegian Attorney General], & Politidirektoratet [The Norwegian Police Directorate] (2010). Seksuelle overgrep etterforskning og informasjonsutveksling [Sexual assaults investigation and exchange of information].
- Senter for Statlig Økonomistyring [National Center for Financial Management] (2009). Eksempler på god mål- og resultatstyring og risikostyring i utvalgte forebyggende tiltak [Best practice: goal- and performance and risk management in selected preventive measures].
- Senter for Statlig Økonomistyring [National Center for Financial Management] (2006).

  Mål- og resultatstyring i Staten en veileder i resultatmåling [Governmental goaland performance management a guide in measuring results].
- Senter for Statlig Økonomistyring [National Center for Financial Management] (2008).

  Risikostyring i Staten håndtering av risiko i mål- og resultatstyringen
  [Governmental risk management risk treatment in goal- and performance management].
- Tella, R. D., & Schargrodsky, E. (2004). Do Police Reduce Crime? *American Economic Association*, 94(1).
- Tusikov, N., & Fahlman, R. (2009). Threat and risk assessments. In J. Ratcliffe (Ed.), Strategic Thinking in Criminal Intelligence (pp. 147-165). Sydney: The Federation Press.
- Walsh, P. (2007). Managing intelligence: innovations and implications for management. In M. Mitchell & J. Casey (Eds.), *Police leadership and management*. Sydney: The Federation Press.

### 11 Appendix A – interviews with practitioners

- 1. What do you associate with the concept of "crime"?
- 2. What does the phrase "reducing crime" mean to you?
- 3. In your opinion, what are the main objectives of the Norwegian police?
- 4. What is your perception of how Norwegian police is managed at the present time?
- 5. Do you have any experience regarding resource allocation in connection to specific problems (crime) in your line of work?
- 6. In your opinion, what are the problems in the police district where you are employed, and how have you come about this impression?
- 7. Do you have any general thoughts regarding the allocation of resources within the section where you are employed?
- 8. What is your impression of how problems are identified and prioritized where you work?
- 9. What knowledge do you have concerning the managerial strategy of the section where you are employed?
- 10. What knowledge do you have concerning the managerial strategy of the police district in total?
- 11. How have you come about whatever knowledge you have concerning these strategies?
- 12. Do you experience coherency between your daily work and strategies/requests from police managers?
- 13. Do you experience coherency between your daily work and identified problems within your area of responsibility?
- 14. Do you think your line of work (patrolling, investigating) is effective in reducing crime? If so, why? If not, why?
- 15. Problem-oriented policing has been decided implemented as the main work-method in Norwegian police. What do you know of this process, and to this extent; what is your opinion of how the implementation has worked?

# 12 Appendix B – interviews with mid-level police managers

- 1. What do you associate with the concept of "crime"?
- 2. What does the phrase "reducing crime" mean to you?
- 3. In your opinion, what are the main objectives of the Norwegian police?
- 4. On what basis are funding and human resources allocated your department?
- 5. What is your understanding of the concept "resource allocation" in your daily work?
- 6. Do you have any experience regarding resource allocation in connection to a specific problem in your line of work?
- 7. In your opinion, what are the problems in the police district where you are employed, and how have you come about this impression?
- 8. What is your impression of how problems are identified and prioritized where you work?
- 9. What is your understanding of the concept management what elements does it include regarding managerial strategy and/or philosophy?
- 10. What elements both inside and outside of your organization do you think improves and strengthen your management in executing it?
- 11. What elements both inside and outside of your organization do you think inhibits and constrains your management in executing it?
- 12. Problem-oriented policing has been decided implemented as the main work-method in Norwegian police. What do you know of this process, and to this extent; what is your opinion of how the implementation has worked?
- 13. In your opinion, in what ways and why is the department you are leading effective in reducing crime?
- 14. In your opinion, in what ways and why is the department you are leading less effective in reducing crime?
- 15. In your opinion, how relevant is cooperation with municipal authorities in your line of work?