# VO as an Alternative to Hierarchy in the Dutch Police Sector



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# INTRODUCTION

The Dutch police system is neither centralized nor fully decentralized, as it consists of "regions" bigger than the municipalities, but smaller than most provinces. These regions are to a large degree autonomous. Such autonomy implies that regional police forces could not communicate with each other in the recent past, as their communication systems differed. They were also unable to look into each other's files, as national police registries were extremely rare. Fragmentation of this kind has seriously hindered cooperation in the recent past.

The solution to regional fragmentation the Dutch police has been looking for can be considered as "virtual integration". For more than a decade now, Dutch police management has tried to establish a joint communications system, and national criminal investigation registries. Large projects like these will, once they become successful, result in an information backbone enabling the coming into being of a network organization, not hindered by the borders between police regions. Yet, success has been evasive. In this contribution we discuss various attempts towards virtual integration and show how fine-tuning between organization and IT projects is essential in reaching the goal of seamless cooperation.

Information and communication technology have been introduced to achieve a more efficient police organization, more and better services to the citizens, and new approaches to policing. Yet, police work remains a politically and socially sensitive activity. This makes the role of ICT in police work similar to that in other organizations, but also more prominently dependent on political choice (Ackroyd, Harper, Hughes, Shapiro, & Soothill, 1992). There is a scarcity of research on the processes of the actual introduction and use of ICT by the police organization at all its levels.

In the first part of this overview we stay close to the role and function of ICT in day-to-day police work. The developments and outcomes of police ISD are influenced by national and cultural variety, which is why our case description is influenced by our own (Dutch) research and experiences. In the second part we provide a case description of the development of ICT in the Dutch police force. We use two different approaches to provide an overview of the dynamics of police ISD. In the first part we approach the police's use of ICT historically. This allows us to focus on the processes that determine the employment of ICT in security policy in general. Then, in the main part of this contribution, we explore the interaction between technology, police organization and politics in more detail, giving a number of illustrations from developments in the Dutch police. In the last section we describe future trends.

#### BACKGROUND

Information and communication technology was introduced in the police in order to support basic functions such as crime investigation, emergency room support, and basic police patrolling. The interaction between police work and computer specialists was similar to the pattern in other organizations where information policy and technology were regarded to be purely technical matters. Application of technology was framed as modern solutions to existing problems. Exemplary for the police attention in the early days was the hope that classification and registration of the modus operandi of criminals might help to solve crime by rapid identification of offenders. Later systems were aimed at providing access to distant databases such as vehicle registration. For most police forces a variety of systems were created to support crime reporting. Such

early systems were built to support the identification of the frequency and patterns of offences. While they were hailed as modern, they often did not work as planned. A common complaint was that centralized systems with their support staff led to cumbersome work processes. In this period centralized computing and the use of mainframes still impeded daily work with computers and relegated the new function to specialists. Thus in this period we can hardly talk of a networked organization.

In the late 1980s and early 1990s, a shift occurred in the type of computing available. In most countries police management hesitantly accepted personal computers to support work. However, individual officers increasingly used personal computers as stand alone support tools for their jobs. Users thus introduced a motley collection of homegrown systems, exploiting widely available commercial packages as well as self-designed programs. At the same time the mainstream use of computers supported central bureaucratic tasks such as planning of work and collecting reports. Thus the integration of ICT supported hierarchical organizational principles. At the end of this period the political climate changed and the demands on the police increasingly stressed efficiency and accountability, providing grounds for the subsequent phase.

In the early 1990s crime in cities became a public concern, which is why the urgency to provide information to policy makers and the general public rose. Administering crime figures became important in increasing public scrutiny of the police (Moore & Braga, 2003), and information technology was used politically to increase the image of crime control (Ackroyd et al., 1992). Information and communication technology were subsequently regarded differently because of these changed priorities. Information and analysis became essential supportive activities for both day-to-day police management and public reporting. The police interest in ICT to support these activities followed the wider acceptance of integrated networked systems in the private sector. Police automation became a cornerstone of networked policing. Attention was directed at introducing new systems, integrating and adjusting homegrown patchwork solutions. Yet, while information-led policing fits very well with current business views of organizing ICT, the integration between different units at various levels of police work and systematic use of information technology is still problematic (Brown & Brudney, 2003).

# **MAIN FOCUS**

In the previous section we have traced the computerization of police work along historical lines. In this section we address the question of how computer use and automation emerge. Which forces determine how the integration of practices of police ICT use are shaped? In our view the introduction and management of information technology and its contribution to networked cooperation in the police is intertwined with the role of management, users, and the institutional environment. This interweaving can best be illustrated by following the changes in the relation between ICT, police work and public policy in concrete cases. We will use two Dutch examples to illustrate these processes.

# POLITICAL CHANGES AND ICT USE

There has always been debate on the question whether the Dutch police system should be centralized or decentralized. Before 1993 the Dutch police consisted of municipal and national police forces mainly, but with the 1993 police act a compromise was reached between supporters of local and of national police. The Netherlands acquired a *regional* police, organized on a scale bigger than the municipalities, but smaller than most provinces. The coordination between the resulting regions was very much left to local control.

Developments in Dutch police computerization mirror the centralization-decentralization debates on the police system. Dutch police computerization started on the local level in the 1960s, but the Home Office soon appropriated successful local projects. Despite this attempt at central steering, 'islands of automation' emerged during the following decade (Rademaker, 1996, p. 20-34). In the eighties the paradigm changed. Now a decentralized view prevailed, which led to heavy infighting between local and central government, and to a tangle of incompatible systems (Rademaker, 1996, p. 49-67).

At the end of the eighties and the start of the nineties a genuine computerization boom got underway. In this period the new police regions were formed as well, which were responsible for their own information systems. Now every region acquired its own integrated information system, providing support for all their business processes at the same time (Stol, 1998, p. 155).

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