

# SECURING THE LEGITIMACY OF SURVEILLANCE: AUTOMATIC NUMBER PLATE RECOGNITION IN DUTCH POLICING<sup>1</sup>

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'We gave a presentation in the court of law, in which we showed a virtual oversight of a map. We used little light bulbs to show our observations of the historical data, ANPR and camera footage. That way we could, so to speak, let them drive towards the scene of the crime. Well, that made quite an impact, also in the court of law. That's the beauty of it. ... That's the power of combining your data. ... So far, I haven't had a single question about the acceptability of this data to the court of law. We simply explained in the official report how we got it, how it's made available and this is simply accepted. No questions. None at all. No.'

## 1 INTRODUCTION

The quote above by a Dutch police officer illustrates how the police can use Automatic Number Plate Recognition (ANPR) to retrospectively track the movements of a murder suspect. This surveillance technology seems to have found its way into the Dutch practice of criminal investigation and criminal justice. The apparent lack of questions about the acceptability of the mentioned application might suggest that either it is considered to be legitimate or that the police actors involved just don't care about legitimacy. In our view, both conclusions represent a much too limited view of legitimacy. Legitimacy-related questions about the application of ANPR could be: 'Does catching a handful of criminals justify the 24/7 scanning of all vehicles passing a particular ANPR-camera?'; 'Which information should be allowed to be connected to the registered number plates?' or 'Why should innocent citizens' data remain stored in police databases?' Legal theory and moral philosophy could be helpful to answer these kinds of questions. In this chapter, however, we take a different approach towards legitimacy

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issues. Instead of asking these kinds of normative questions ourselves, we are interested to learn whether these questions are posed by the actors involved in ANPR policy-making, and how these are addressed. In other words, how important is legitimacy in police practice and how do police actors deal with it? Consequently, the central research question in this chapter is:

*To what extent do the police make an effort to secure the legitimacy of their ANPR policy and, what strategies do they deploy in doing so?*

From both a moral and a practical point of view the issue of legitimacy is of relevance to the police. From a moral point of view, public organisations ought to strive for legitimacy. It would be amoral, at least in democratic societies, to exercise power without legitimately established rules, shared values, political acknowledgement and social acceptance. Legitimacy sets boundaries and obligations for the policies and actions of public authorities, thereby safeguarding citizens' fundamental rights. The issue of legitimacy is especially relevant in situations where the public organisation interacting with citizens is very powerful (Zouridis, 2007). The modern police force can be qualified as such for two reasons. First of all, their powers include the monopoly of the use of force that they share with the army. This right and ability to use force against citizens distinguishes the power of police from that of other public organisations like the Tax Authorities or the executive arm of the Dutch Ministry of Infrastructure and the Environment.<sup>2</sup> Secondly, a powerful organisation can become even more powerful once it has incorporated information technologies into its policies and practices (Zuurmond, 1994). This is clearly the case where the police are concerned, given the widespread adoption of nodal orientation, intelligence-led policing and technology-led policing (Bekkers & Van Sluis, 2009a; De Pauw, Ponsaers, Van der Vijver, Bruggeman & Deelman, 2011; Van Sluis, Marks & Bekkers, 2011). Besides their moral obligation to strive for legitimacy, the police have a practical drive to do so. They simply need legitimacy in order to survive. Vedder (2007a, p. 198) calls this pursuance of legitimacy 'for reasons of political efficiency and effectiveness'.

Securing legitimacy, however, is far from an easy task because it is an abstract concept (Zouridis, 2009, p. 293). Yet legitimacy *is* addressed in the practice of policing. This occurs even literally in the 'Police in Evolution' report,<sup>3</sup> in which the mission, vision and strategy for the Dutch police are discussed (Board of Chief Commissioners, 2005). This report shows 24 instances of the word 'legitimacy' in 18 pages. This indicates that the issue of legitimacy is of some practical relevance

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2. This organisation is known as Rijkswaterstaat in the Netherlands (the Directorate General for Public Works and Water Management).

3. In Dutch: 'Politie in Ontwikkeling'

to the Dutch police, which isn't surprising when considering Beetham's argument that all power structures seek legitimation (Beetham, 1991, cited in Sparks, Bottoms & Hay, 1996, p. 85; Zouridis, 2009, p. 293). This assessment, however, doesn't help to form a thorough understanding of the meaning of legitimacy for technological-led policing. In order to do so we analyse legitimacy issues regarding the use of ANPR in a local police context.

*Exploring legitimacy issues in a local police context*

This chapter discusses one of the largest and most prominent police forces in the Netherlands as far as ANPR is concerned; it is referred to as 'the Nodalville police'.<sup>4</sup> In this case study, we discuss how the Nodalville ANPR policy has evolved in terms of legitimacy. Additionally, we consider how the police actors involved have attempted to secure this policy's legitimacy. In this study, policy-making is considered to be a non-linear process in which formal decision-making at the managerial level and work floor decisions at the implementation level influence each other. In reaction to the top-down approach of policy-making, this can be called a bottom-up approach in which policy implementation is viewed as part of the policy-making process rather than a separate process (Hill, 2009, pp. 202-204). Therefore, both formal decision-making and operational experiences with ANPR are included in the analysis. This case study is an endeavour to understand how police actors involved in ANPR policy-making perceive and handle this surveillance technology. As such, methodologically, this study can be characterised as an interpretive-qualitative policy analysis (Yanow & Schwartz-Shea, 2006; Yanow, 2007), in this case from the perspective of the surveillant.

Data generating for this case study took place between December 2008 and April 2009.<sup>5</sup> Data generating methods included participatory observation, interviews and document study. Three key informants played a central role, because contacts with them are more extensive than with others, and they regularly point to new sources of information in the course of the research. Participatory observation included shadowing<sup>6</sup> two of the key informants, who work as policy advisors in the department responsible for all policy development concerning information technologies. Field notes were made of overheard conversations and discussions. The third key informant leads a division responsible for all ANPR data management. All requests for ANPR data from within and outside the police

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4. The real name of this police force is not disclosed at their request. The imaginary name 'Nodalville' points to the prominent attention for the nodal orientation strategy in this police force's ANPR policy.
  5. For a more elaborate account of the position of the researcher and the research methods used in this case study see Van Ooijen (2011).
  6. On the method of shadowing see Geuijen, 't Hart and Yesilkagit (2007).

force are dealt with by this 'ANPR division'. Therefore, this key informant is able to provide adequate information about the practice of ANPR. In addition, the ANPR data system and its application were observed during two police actions. Besides conversation-style interviews with the mentioned key informants at the Nodalville police force, semi-structured interviews are conducted with twelve informants. A total of seven interviews took place with informants representing the Nodalville police force. The other five informants are either national police representatives or employees of the local public prosecutor's office. The local police informants were mainly asked to describe their involvement with ANPR and elaborate on successes and problems they encountered. The other informants were asked to provide information about the policy context in which the local police force operated and comment on their experiences with the local police force. The interview protocol relied on open-ended questions, leaving room for additional questions tailored to the specific interview situation. The document study involved policy chapters, work instructions and internal (memos, intranet postings, e-mails) and external correspondence (newsletters, publications and presentations) to see whether and how legitimacy issues are addressed.

In order to analyse how the Nodalville police deal with legitimacy issues, the concept of legitimacy is first explored in literature. In our discussion of legitimacy, we distinguish legal, political, ethical and social dimensions. We structure ideas about the correspondence, whether desirable or not, between these four dimensions and their relative weight. After this discussion on the concept of legitimacy, we move on to the theme of nodal orientation. Our assessment is that this police strategy, which lies at the heart of innovations in the use of ANPR, raises some questions regarding legitimacy. In the subsequent presentation of the case study, first the functionality and applications of ANPR in the Nodalville police region are described. Then, we address the question of what the police actually do in order to be legitimate. To what extent and using which methods do the police pay attention to the four dimensions of legitimacy? Finally, the conclusions are presented together with a reflection on the importance of legitimacy in the practice of policing.

## 2 LEGITIMACY AS A MULTIDIMENSIONAL CONCEPT<sup>7</sup>

Legitimacy is a key concept in the political sciences and public administration, but also an 'essentially contested' concept, which has sparked debate for almost as long as politics itself. Many use the term legitimacy and generally know what it means, but it remains a difficult concept to comprehend. What exactly is legiti-

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7. This theoretical analysis of the concept of legitimacy is based on Meike Bokhorst's forthcoming PhD thesis.

macy? Which factors determine legitimacy? The lack of clear, univocal and unanimous answers to these questions results in some scholars narrowing down the concept, giving preference to related or underlying concepts (e.g. credibility, trust or support) or avoiding the term legitimacy altogether because it is complicated and 'it will never become clear anyway'. Others remain fascinated by attempts to make legitimacy more comprehensible. We prefer to make the concept more understandable by analysing different dimensions of legitimacy.

The concept of legitimacy was widely used from the nineteenth century onwards. The word itself appeared in the French political lexicon at the beginning of the nineteenth century and was then used only to describe a political system that is primarily determined by the law (Rosanvallon, 2008). Many dictionaries, like Webster or the Oxford English Dictionary, define legitimacy as 'legality' or 'conformity to the law'. But dictionaries give exactly the same definition for 'legality'. However, these two terms are not synonyms. Legality may be the literal translation of the term 'legitimus', but the development of legitimacy theory originated with the distinction between legitimacy and legality. By the thirteenth century, Thomas Aquinas had already distinguished illegal and illegitimate forms of tyranny. A tyrant can promulgate a law legally, but if that law is not approved by those to whom it applies, it will not be deemed legitimate. The idea of legitimacy stems from Roman law and is conveyed by the medieval argument of '*quod omnes tangit ab omnibus approbatur*': what touches all must be approved by all (Merquior, 1980, p. 3).<sup>8</sup> 'Recognition by all' thus forms an essential political dimension of legitimacy as well as a distinction with the legal term 'legality'. The law serves as an important instrument to codify what is recognised by all and to give it legal validity or strength. Legality thus is not a synonym, but one of the dimensions of or conditions for legitimacy.

There are many definitions of legitimacy in use, which have been heavily debated among political and social scientists (Barker, 1990; Beetham, 1991; Black, 2009). From these definitions and discussions, it can be concluded that legitimacy is a normative as well as a descriptive concept, one that has both an informal and a more formal (intersubjective or objectified) side. So we need a definition that combines those different aspects. Beetham's definition (Beetham, 1991) is a good example and is often and extensively used. According to Beetham, authority is legitimate when:

- it is acquired and exercised according to established rules (legality);
- the rules are justifiable according to socially accepted beliefs about (i) the rightful source of authority, and (ii) the proper ends and standards of government (normative justifiability);

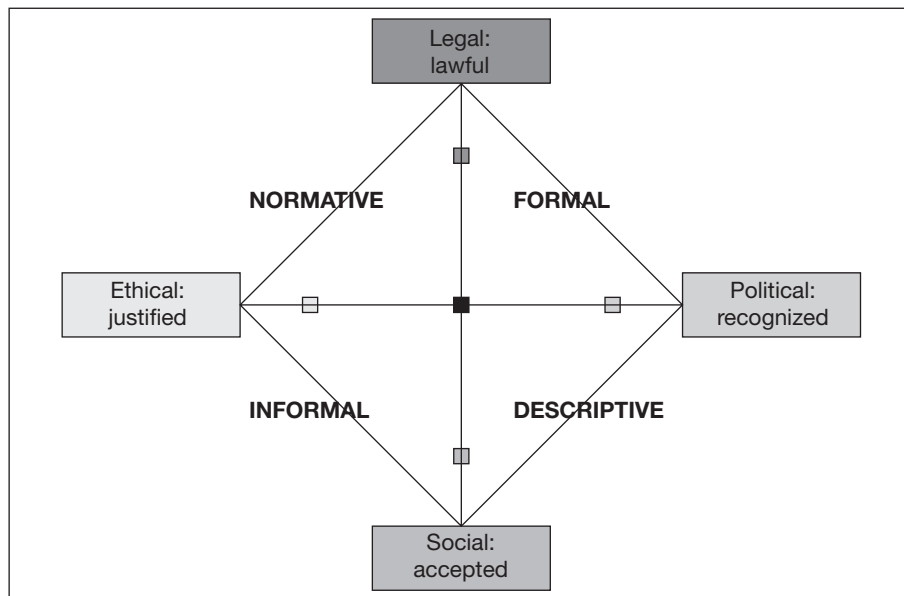
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8. Thinkers like William of Ockham, Grotius, Hobbes, Pufendorf, Locke and Montesquieu also contributed to the early theory development of legitimacy.

- positions of authority are confirmed by the express consent or affirmation of appropriate subordinates, and by recognition from other legitimate authorities (legitimation).

In this chapter, legitimacy is briefly defined. According to Beetham, it is the extent to which power is justified, legal, politically approved by all and accepted by subordinates. The interesting yet complex characteristic of the concept of legitimacy is its multidimensionality. One can state that the formal legal and political dimensions are each a necessary, but insufficient condition for legitimacy. Democratic constitutional states require laws for legal justification and politics ought to represent citizens' wishes. The necessity of informal ethical and social dimensions are matters which are more under discussion here. It is clear, however, that the lack of social and ethical legitimacy will soon affect the legal and political dimensions of legitimacy. Without justice, there can be no legality, and without social acceptance, there can be no political recognition. Indirectly and in the long run, the ethical and social dimensions seem to be necessary for legitimacy as well. It is debatable whether one can still speak of legitimacy if one of these four dimensions is missing. One can argue, however, that the higher an authority scores on each of the separate dimensions, the stronger its legitimacy is. This becomes especially clear when the four dimensions are presented in the following diagram:

Figure 1 Maximum legitimacy



This diagram shows the level of legitimacy of a certain authority by determining the extent to which each dimension is met. By connecting the positions on the two axes a 'legitimacy diamond' appears, indicating the level of legitimacy. Figure 1 is an example of maximum legitimacy because the authority meets all four dimensions of legitimacy.

#### *Relation between the dimensions of legitimacy*

Acceptance, justice, legality and recognition by all citizens are four important dimensions of legitimacy. The question that remains is how they relate to one another and how they each contribute to legitimacy. A first possibility is a political system that respects human dignity, is recognised by all and is trusted by everyone. However, the majority of people will not consider the system to be legitimate if it does not function in accordance with the law. Every so often in a democracy, governments, ministers, members of parliament, mayors, aldermen and other political representatives resign after abusing their authority, unjustly using public means or exceeding important rules of integrity and trust. Ultimately, all citizens are equal before the law and administrators cannot create and enforce laws credibly and authoritatively if they do not comply themselves.

A second possibility is a political system that respects human dignity, acts in accordance with the law and is trusted by the people, but is not recognised by all and does not have a political mandate, will not be considered legitimate either. Leaders of unrecognised states or dictatorial regimes, for example, have difficulty gaining recognition, both within their own country and abroad. Even if the leaders have the power to occupy the seat of government and put their rivals in prison after a lost or manipulated election, they will still be illegitimate in the eyes of other states and without a clear political mandate.

A third possibility is a political system that respects human dignity, acts in accordance with the law, has once been recognised by all, but is not accepted by citizens. Such a system has a legitimacy problem that will only grow if the acceptance and trust decrease and remain fundamentally low. If the system does not succeed in solving this problem, it risks losing its political mandate in the next election because growing numbers of voters could be tempted to join protest parties and result in a decrease in voter turnout or participate in massive protests. For example, the political trust in Belgium has been so low lately that the tenability and rationale of the country's future is under discussion. It is difficult to measure and interpret issues like acceptance, trust and support. Since the degree of political trust fluctuates immensely and differs between groups, periodic elections are usually the most reliable and stable measure to determine political support and acceptance.

A fourth and final possibility is a political system that acts in accordance with the law, is recognised by all, and is trusted and obeyed by all, but does not respect principles of justice such as human dignity. Who would call such a system fully legitimate? Perhaps, for example, regimes that violate the rights of minorities or do not recognise human rights, like the freedom of press. Of the four dimensions of legitimacy, the principles of justice remain the most subjective, but they are also the most fundamental. Ever since the Second World War, international organisations have sought to politically objectify human dignity and other principles of justice, embed them legally and make them verifiable, as they did in the Universal Declaration of Human Rights (1948).

But how are these different dimensions of legitimacy related to the police strategy of nodal orientation? We will try to answer this question by describing the policy context of nodal orientation and analysing the ANPR policy of the police.

### 3 POLICY CONTEXT: NODAL ORIENTATION

#### *Nodal orientation as a new police strategy*

In 2005, the Board of Chief Commissioners<sup>9</sup> of the Dutch police published a new vision memorandum on policing. The 'Police in Evolution' report portrayed a re-orientation of the task and position of the police. The presented mission, vision and strategy were not supposed 'to do more – or less – than offer a course for developments to follow with a view to tailoring police tasks as closely as possible to society's requirements' (Board of Chief Commissioners, 2005, p. 12).

'Nodal orientation' was highlighted as a key concept in the new police strategy. Derived from the work of Manuel Castells' on the network society (Castells, 2000), the police distinguished a space of flows alongside a space of places, urging them to take up a new strategy that would concentrate on the nodes and flows constituting the space of flows. In their own words: 'The nodal orientation ("infrastructure policing") leads to surveillance of the infrastructure, or rather, the flows of people, goods, money and information that use the infrastructure to move from one place to another' (Board of Chief Commissioners, 2005, p. 78). In order to realise the surveillance of flows, the police needed to develop information-driven working methods and secure the exchange of information with partners in the safety domain (Board of Chief Commissioners, 2005, p. 80). This emphasis on the importance of information encompassed a more technology-intensive way of working, which explicitly included the use of 'catch scan technology' where observations and registrations of people and vehicles are compared with a

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9. Raad van Hoofdcommissarissen.



wide range of databases (e.g. unpaid fines, stolen vehicles, missing number plates, known suspects)' (Board of Chief Commissioners, 2005, p. 79). In subsequent policy documents this technology is predominantly called Automatic Number Plate Recognition (ANPR) and is as such referred to in this chapter.

Bekkers, Van Sluis and Siep (2006) emphasise that this particular interpretation by the Dutch Police of the concept of nodal orientation is rather unique, and should not be confused with nodal policing. In academic circles the latter concept usually points to the police as one of the nodes in networks of security oriented organisations (see Shearing, 2005). In a more recent discussion of nodal orientation in Dutch policing, however, Van Sluis, Marks and Bekkers (2011, p. 1) state that 'the Dutch interpretation of the nodal orientation combines a perspective on policing in infrastructural networks with one that considers the police as a player in (social) security networks'. Apparently, the meaning of the concept has evolved since its introduction in police circles in the 'Police in Evolution' report. Legitimacy problems arising from nodal orientation have been debated in both academic and police circles.

#### *Legitimacy problems as a reason and a result*

In a review of an article by Bekkers and Van Sluis (2009a), where they discuss the state of affairs regarding nodal orientation in Dutch policing, Bruggeman (2009) expresses three matters of concern which all point to legitimacy problems. First, he questions how far the police may and should go concerning the 'random' application of nodal orientation, especially in the light of privacy issues. Second, Bruggeman reacts to the assessment of Bekkers and Van Sluis that the current manner in which nodal orientation functions can be characterised as 'island innovation', a collection of as yet unconnected projects. As such, nodal orientation has so far not proven to be a new police strategy, but is merely useful for framing new practices and re-framing existing ones. Bruggeman (2009) wonders whether this use of the concept has any future at all in the light of ongoing technological developments. He argues that technological possibilities, such as the connection of Radio Frequency Identification (RFID) to the internet calls for more debate on technology-led policing in police circles. Consequently, he casts doubt on whether further investments in nodal orientation can be legitimated. The third issue raised is a need for self-regulation by the police to uphold the democratic quality of nodally oriented policing. In conclusion, Bruggeman states that once these three issues have been addressed, this will stimulate a more lasting acceptance among citizens. Summarising Bruggeman's concerns, he identifies legitimacy problems in terms of legality, moral justification and social acceptance. In subsequent responses, (Bekkers & Van Sluis, 2009b) as well as in a more recent article (Van Sluis, Marks & Bekkers, 2011), the authors affirm the importance of citizens' privacy as well as the issue of democratic accountability of nodally or-

iented policing. In addition, they emphasise that nodal orientation isn't merely a matter of technology, but has political relevance as well and as such it needs political-democratic legitimation (political legitimacy).

These are remarkable findings when reassessing the reasons why a new vision and an operational concept were needed in the first place. Some of the reasons which led the police to develop the strategy of nodal orientation can be seen as possible threats to legitimacy.

#### 1. Decreasing effectiveness:

The police signal a decreasing effectiveness in their task of safeguarding society and fighting crime, because of several changes in society, such as for example, individualization and increased mobility. The police themselves realise that 'efficiency and efficacy are now important pillars for the legitimacy of policing' (Board of Chief Commissioners, 2005, p. 25). Consequently, insecurity about what police measures can attain in contemporary society may infringe upon the right to use them in the first place.

#### 2. Decreasing public support:

'There is a feeling that the police should perform better. Wherever the expectations and performance levels are difficult to reconcile, citizens become dissatisfied, they lose confidence in the police and the police lose their legitimacy. The police aim to continuously optimise their performance and, at the same time, their public image. Part of this process involves the profession forming a shared, coherent view on what will contribute to promoting safety. The present document contains the guiding principles of such a view, expressed as a mission, a vision and a strategy for the coming years.' Board of Chief Commissioners (2005, p. 21).

Apparently, the potential loss of legitimacy could be countered by developing a new strategy, according to the police. The respective contributions by Bekkers and Van Sluis (2009a; 2009b), and Bruggeman (2009), however, reveal that the strategy of nodal orientation seems to pose some legitimacy risks of its own.

This apparent tension of nodal orientation solving and causing legitimacy problems at the same time, can be understood when considering the scale of legitimacy. A distinction between two scales of legitimacy can be made: occurrent legitimacy on the one hand and dispositional legitimacy on the other. The latter refers to the legitimacy of an organisation in its entirety, whereas the first involves the legitimacy of a particular activity (Vedder, 2007b, p. 9). These two scales may be at odds with each other in two extreme ways. First, a legitimate organisation can perform non-legitimate actions. Secondly, there may be a non-legitimate organisation performing legitimate actions. Bearing in mind the multidimensional

nature of legitimacy, it is unlikely for either of these scenarios to be the case here. Regarding dispositional legitimacy, we will probably not find the Dutch Police to be entirely legitimate or unlawful. Indeed, the Dutch police organisation is facing some legitimacy problems, but this does not mean all legitimacy has disappeared. As far as occurrent legitimacy is concerned, it is also very questionable as well to assess whether nodally-oriented police actions are either completely legitimate or unlawful. Yes, nodal orientation poses a threat to citizens' privacy, but this doesn't imply that it is unlawful. It is more likely for one or more legitimacy dimensions of the police organisation to be at odds with one or more legitimacy dimensions of nodal orientation.

Nodal orientation, in any case, places the police in a difficult position. They may lose organisational legitimacy if they don't adopt this strategy, but run a risk of damaging occurrent legitimacy if they do. How do the police deal with this tension between legitimacy and non-legitimacy? How can they secure an equal balance of legitimacy if this is at all possible? In the next section, we discuss a case of nodal orientation in police practice: the use of ANPR by the Dutch Nodalville police force.

#### 4 CASE STUDY: ANPR IN POLICE SURVEILLANCE

##### *Police surveillance in action: from hotlists to direct pursuit and further investigation*

ANPR involves more than just cameras taking pictures of number plates. Since its first application in Dutch policing in the nineties by the National Police Services Agency<sup>10</sup> it has evolved into a complex system that can convert traffic data into valuable police information (Politie Rotterdam-Rijnmond, Korps Landelijke Politiediensten & VtS Politie Nederland, 2008). We emphasise 'can', because, as will be demonstrated, not all data actually amounts to information.

Technologically speaking, the Nodalville ANPR system consists of cameras for data gathering, databases for data storage, a network connection for data access and software for data linkage and analysis. We briefly highlight some basic aspects of each of these technological components. The Nodalville police force owns both fixed and mobile cameras. The fixed cameras cover the major entry and exit roads and gather data for 24 hours a day, 7 days a week. The mobile cameras in police vehicles are switched on more irregularly. What data do these fixed and mobile cameras exactly gather? A camera automatically takes pictures of the number plates of all passing vehicles. The underlying software then converts these digital photos into alphanumeric data. Both the picture files and

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10. This first application in policing was predominantly aimed at traffic checks.

the alphanumerical number plate data are stored along with data on location and time. The network connection then enables an authorised police-officer at the office to access this data within seconds. From one fixed location alone on the average over 80,000 passages are registered per day. At the time this case study was conducted, all data was stored for four months and permanently deleted afterwards, except for the data which in the meantime had been selected for further police investigation. A software program helps the police to enrich the millions of stored ANPR data records in order to obtain information that could be of value in different kinds of police processes. The program creates hotlists of number plates with which 'something's up', to use the words of a police officer. At this point in time, the police define the criteria for inclusion on a hotlist by looking at the car owner's past or present offences. Examples range from unpaid speeding fines, alcohol related offences and drug trafficking to wanted felons. By linking police data on offences to data on car owners, hotlists of number plates warranting attention are generated.

Basically, the hotlists can be used in two types of applications, either direct pursuit or for further investigation. Direct pursuit involves comparing number plates to a previously composed hotlist in real-time to take immediate action. The Nodalville police organise special action nights to actually remove the 'hits' from the anonymous traffic flow. On these occasions, police motorcyclists are present at one of the fixed camera locations. Upon a signal from their colleague who is watching the ANPR system, they drive up to a particular car and escort it to the side of the road where police officers are awaiting to deal with the particular offence. This, for example, involves collecting fines, checking alcohol abuse or making an immediate arrest. Until 2007 the Nodalville use of ANPR was limited to these types of applications, which are aimed at traffic control. This focus is reflected in the police organisation where ANPR is handled by the traffic police department. This changed in the course of 2007 when the responsibility for ANPR policy and organisation shifted to tactical-operational and strategic information divisions within the police force. These divisions take care of passing vehicles that are not registered on any hotlist, the so-called no-hits. They do remain saved in the ANPR system, because of their possible relevance for the second type of application: further investigation. This means that a picture, licence plate data, location and time are registered for all vehicles passing ANPR cameras in the Nodalville police district.

The reasoning of the Nodalville police is that all ANPR data, both 'hits' and 'non-hits', may prove to be of use later on for crime fighting purposes. Specific queries help the police to allow the necessary information emerge from the huge amount of stored data. As we mentioned in the introduction of this chapter, the police have used the ANPR system, for example, to retrospectively track the movements of a murder suspect. Another way of using ANPR data for further investi-

gation is the analysis of movement patterns of a particular group of people. The Nodalville police have, for example, compiled a hotlist of house burglars. On this list there are names and number plates of people who are known to have been convicted for, suspected of or otherwise involved in burglaries. This list is updated weekly and used to find suspects of particular burglaries, and to enable the police to catch burglars red-handed. Finding suspects is done by geographically plotting committed burglaries and hotlist movements. Also, the time of the burglaries and the time at which the fixed camera locations were passed are taken into account when determining which cars could be connected to which burglaries. At the same time, the system allows for exclusion of particular suspects. Furthermore, movement patterns are analysed to determine at what time a burglar returning home is likely to pass by one of the camera locations. This allows the police to position a field officer at the scene so they can single this person out of the traffic stream, possibly finding the stolen goods in the trunk of the car.

#### *The Nodalville police ANPR policy*

The application of ANPR for the purpose of further investigation confronts the Nodalville police with questions concerning the boundaries of the use of this technology. Framed more positively, since the expansion of ANPR equipment in 2007, the police have speculated about what else they can and may use ANPR for, as several policy documents reveal.<sup>11</sup> The discussion about the limits to ANPR has moved on since 2007, because the Nodalville police have expanded their range of ANPR devices and software and looked into applications for further investigation that until that time weren't customary. The police initially focus their attention on the legal background, but later reports show contemplations about social support and political reactions. Between 2007 and 2009 the Nodalville police demonstrated an ambiguous approach towards the legal dimension of legitimacy. In several policy documents the Nodalville police assess that there is no law in the Netherlands which clearly determines how the police may or may not use ANPR. Nodalville policymakers actively investigated which laws are applicable and came to the conclusion that the current legal framework doesn't provide sufficient guidance on what course of action should be followed. This assessment, however, doesn't pose a reason why not to develop any course of action at all. In the lack of clear regulation, the legal department develops their own privacy policy in order to provisionally give direction to their ANPR actions. At the same time, the analysis of policy documents reveals that legality is-

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11. These involve four internal policy documents which were accessed confidentially for research purposes. Citations from these documents are therefore referred to by mentioning 'Nodalville police policy document' instead of their exact source. These documents were written between 2007 and 2009.

sues are considered to be a risk as well. The police express their concern that the development of legal norms and political discussion may put a stop to the originally designed and enacted plans. This is especially the case for possible violations of citizens' rights to privacy.

In order to overcome this legal insecurity, the police have developed an instrumental concept of legality. They don't wait for legal security to arrive by itself, but actively engage in discussions at the Ministries of Interior Affairs and Justice in order to help create legal possibilities. As one informant formulates it: 'We want to prevent having a suspect in front of a judge who then considers the ANPR data to be illegitimate evidence'. The Nodalville police actively engage in other discussion groups as well. They, for example, have representatives in all nationally organised police work groups on ANPR. Still, this doesn't automatically mean that the political dimension of legitimacy is honoured in the strict sense of the word. Informants say that their reasons for participating in these groups are mainly to educate other police forces on how they should handle ANPR and to influence the discussion on legal norms:

'We now discuss these matters in order to prevent being stopped later on.'<sup>12</sup>

'The connection to the national program agency has few consequences for the further development of the regional project. The regional project will supply the national program with information on how cases are solved in Nodalville'<sup>13</sup>

Social support for ANPR did not receive the Nodalville police's attention until 2008. Policymakers actively follow the ongoing political and societal discussion on ANPR. For this purpose, they consult research reports, follow the news media and consult online forums where citizens express their opinions on the matter. Policymakers state they take what some actors have to say more seriously than others. Nonetheless, they also listen to actors they find to be 'less relevant', but more for the sake of listening than for the actual outcome. The Dutch Data Protection Authority (*College Bescherming Persoonsgegevens* (CBP)), for example, did receive a formal reply from the Nodalville police on one of their reports, but it was granted little importance in the actual policy-making process. According to the Nodalville police policymakers, this strategic consideration, however, could strengthen the police's consideration of social developments. In addition, the Nodalville police aim to limit society's awareness of ANPR through their conservative communications policy. There have been press releases about the direct pursuit application, but these don't give away details about the technology.<sup>14</sup> They

12. Quote from interview with Nodalville policymaker.

13. Nodalville policy document is a fictitious name given to the document by the researchers.

14. According to press releases found on the Nodalville police's intranet.

merely mention the results of a particular action, such as how many fines were collected at a certain location. On certain occasions some information about crime fighting applications is provided, but only in very general terms and on the request of journalists.

For most informants it is quite clear that ANPR already increases the effectiveness and efficiency of the police force and will do so even more in the future through expanding applications. Informants and documents usually refer to success stories of the direct pursuit application in law enforcement to support their claim, and use this argument to legitimise further applications of ANPR. The legitimacy of a particular police action (the direct pursuit application) is used to refer to the legitimacy of the police organisation as a whole. 'Policing becomes more effective', was a phrase expressed more than once. In addition, this claimed dispositional legitimacy is used to justify yet another police action – the further investigation application. As a result, the provided justification is not a sound one. In addition, the Nodalville police increasingly emphasise the value of proactive policing as a supplement to reactive policing. According to a policymaker, proactive policing may help the police because this approach could diminish reactive policing: 'Now only about two out of ten cases can be handled'. One of the values of proactive policing, therefore, could be to gain in efficiency, according to the police. The concept of nodal orientation is also often used as a means of justification: 'ANPR is efficient, it's effective, and of course it's nodal orientation.' Most informants state this without properly explaining what nodal orientation entails and why it is important. The power of the concept of nodal orientation is that it offers a strategic perspective by reframing existing practices and projects and framing new practices (Bekkers & Van Sluis, 2009a). This is precisely what has happened in the police region of Nodalville. They started using ANPR shortly before the 'Police in Evolution' report appeared and ideas about nodal orientation could be passed on to the Dutch police forces. This police force has been using ANPR for law enforcement purposes since 2004 but is gradually expanding the range of applications to innovative ways of crime fighting. At the same time, the number of ANPR cameras owned by the Nodalville police has substantially increased, resulting in more data gathering. Using ANPR at infrastructural nodes doesn't automatically imply a strategic repositioning of the police. Van Bruul, Damkat, Van Dijk, Frenken and Van Haasteren (2008) argue that in most cases this is no more than a technical approach to traditional police work (Bekkers & Van Sluis, 2009a, p. 52). Even if this were the case in Nodalville, ANPR still is a very powerful tool.

Essentially, the above-mentioned explorations made by the Nodalville police force have to do with developing a legitimate ANPR policy. A provisional counterpoint in this policy process has been the blame expressed by the CBP in January 2010. The CBP concludes that two Dutch police forces violated the law know-

ingly and willingly by saving data about no-hits (College Bescherming Persoonsgegevens, 2010). The subsequent order from the CBP to erase no-hit data from all police records also applies to the Nodalville police.

*Case analysis from a legitimacy point of view*

In this case study two important policy changes are observed that are connected to a changed perception of legitimacy by the Nodalville police. The first change involves the transition from state regulation to discretionary drive in 2007. During the second change, at the start of 2010, discretionary drive was replaced by socially restrained ambition.

The first change was initiated by the broadening of ANPR applications from traffic control to innovative crime fighting. The interaction between the Nodalville field officers and strategic policymakers instigated this expansion. The field officers used the extra equipment, which is at their disposal between 2004 and 2007, not only to conduct more traffic controls, but to take initiatives to analyse the collected data for crime fighting purposes as well. At the same time, strategic policymakers work on the development of the nodal orientation strategy featuring a big role for ANPR. The interaction between both developments allows the Nodalville police to further develop ANPR policy and practice with discretionary drive. This development style could be characterised by Nodalville police's drive to explore and implement the possibilities for the execution of police tasks that are generated by technological developments. Meanwhile, an ambiguous discretion is at play. On the one hand, the police force shows discretion in the sense that they interpret legal, political, ethical and social preconditions rather freely. The Nodalville police, for example, interpret the Police Data Act<sup>15</sup> in such a way that it covers the storage and processing of no-hits. On the other hand, the police force shows discretion by being very cautious in their external communication about the most innovative ANPR applications. As a part of the discretionary drive during this second phase (2007-2009), the Nodalville police started to pay more attention to legitimacy because it had become more debatable for the two reasons we mentioned in the section about nodal orientation: decreasing effectiveness and decreasing public support.

In summary, the expansion in ANPR applications in 2007 causes lack of clarity in the area of legitimacy. It is very uncertain to what extent and which new applications are to be legitimised. Also, some questions remain in the ethical area, because the Nodalville police are insufficiently able to demonstrate whether the innovative application of ANPR helps them to fulfil the moral duty of protecting a changed society. Politically and socially speaking there is little or no attention for

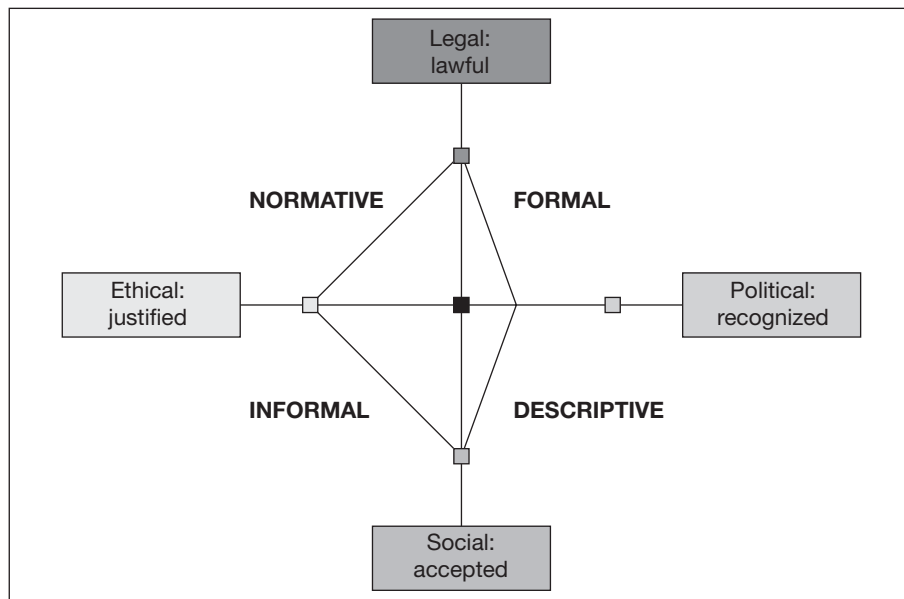
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15. 'Wet Politiegegevens' in Dutch.



the changed ANPR policy in Nodalville. At the same time, the legitimacy of ANPR applications in police traffic controls has been secured as a result of an increased effectiveness and efficiency within legal limits. Moreover, little social resistance is found towards these ANPR checks. The legitimacy diamond below illustrates this.

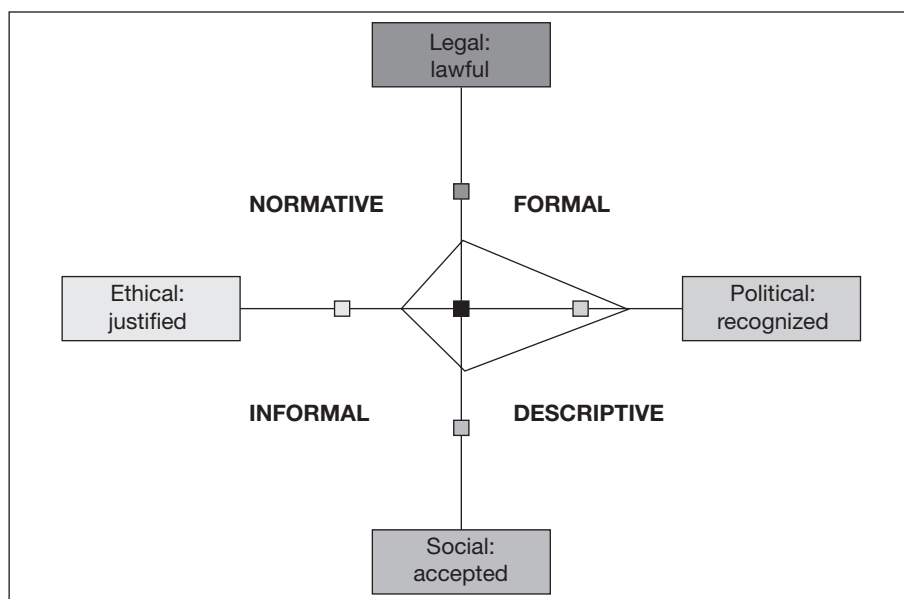
**Figure 2** Discretionary drive in Nodalville ANPR-policy



More clarity about what is legitimate concerning ANPR applications, and especially about what is not, arised at the start of 2010 after the publication of the CBP report. The CBP's report reprimands the Dutch police force, warning that it is neither socially nor legally acceptable to record no-hits. Consequently, the Nodalville police were forced to deviate from their discretionary drive to restrained ambition. The investments in ANPR equipment, organisational support and contact with other police forces, the national police organisation and the Dutch Ministries of Interior Affairs and Justice actions have paid off because there is increased political support for further development of ANPR. The coalition agreement of the Dutch cabinet of the day states that: 'Vehicle recognition will be used to facilitate the prevention, investigation and prosecution of crimes and the enforcement of fiscal obligations. To this end, wide use will be made of automatic number plate recognition systems' (Dutch Government, 2010, p. 56). In 2011, the Minister of Security and Justice made this plan more concrete by proposing a new law to parliament 'to allow the police to log information, obtained by ANPR for a period of four weeks, for criminal investigation purposes after a criminal act has been committed or after criminal charges have been pressed'

(Van Sluis, Marks & Bekkers, 2011, p. 7). Important from the point of view of moral justification is that the new law will only be prolonged after its trial period of three years if the use of ANPR data proves to be effective for the criminal investigation process. In short, even though political support has increased significantly, the ANPR policy still lacks legal, ethical and social legitimacy, which is illustrated in the legitimacy diamond below.

Figure 3 Restrained ambition in Nodalville ANPR policy



## 5 CONCLUSION

To sum up the arguments and findings, we will reflect on the essential points and aspects. The initial research question was: to what extent are the police making an effort to secure the legitimacy of their ANPR policy and what strategies do they deploy in doing so? The case of the Nodalville police shows that police policymakers are very sensitive about legitimacy issues, but mainly for pragmatic reasons. The legitimacy diamond we present as an analytical tool has helped to make clear which shifts take place in the legitimacy dimensions in the course of the years, and how these influence policy-making in the case of the Nodalville police force. In this case, the legal dimension of legitimacy plays an important role. The police's insecurity about the lawfulness of innovative ANPR applications has led to a legitimacy offensive towards other Dutch police forces, politics and society. Among other police forces and in a political working group, the police instigated moral awareness of not disregarding the ANPR potential to com-

bat new crime (ethical legitimacy). At the same time the police emphasised, in the media, the effectiveness and efficiency to be gained from ANPR for policing while disregarding the privacy implications of innovative applications, and the extent to which people value their privacy in comparison to safety (social legitimacy). In order for the police to come closer to securing the legitimacy of this type of surveillance, they need to find substantial support for the moral claim of increased effectiveness and efficiency. The fact that the Minister of Security and Justice has ordered an evaluation of the effectiveness of ANPR for criminal investigation purposes, along with a new law for ANPR, is a good start to solving this legitimacy deficit.

This case is a typical example of the idea in the sociology of law that there is a gap between the law of the books and the law in action. Especially in case of fast technological developments it is difficult to develop a new legal framework in advance or simultaneously. First there is an (implicit) normative consensus within the police that the way they use the ANPR applications is justified largely due to instrumental gains. And, furthermore, the police are trying to convince politicians and the public that the legal framework has to allow for adaptations to the new technological possibilities. It could be that the police will discover that there is a lack of support in public opinion once it is too late. A way to bridge or to narrow the gap between the law of the books and the law in action is to explore and raise the normative consensus at an early stage, for instance, by organising a dialogue about guidelines for the use of ANPR with stakeholders outside the police, such as the interest groups for car drivers, protectionists of public safety, privacy activists, etc.

Besides legitimizing actions in the policy practice of ANPR, some work has to be done at the strategic level of nodal orientation. Some confusion in discussions about the legitimacy of nodally-oriented policing has arisen, because arguments referring to occurrent and those referring to dispositional legitimacy get intertwined. This is not very surprising given the ambiguous meaning of nodal orientation in Dutch policing, pointing to both surveillance of infrastructures (occurrent) and the position of the police organisation in security networks (dispositional). Further development of nodal orientation as a police strategy is necessary to gain more clarity about the legitimacy of its still existing practices, such as ANPR. For this purpose, both the police and academics should work together to make the relation between the occurrent and dispositional nodal orientation more explicit. We hope our findings will help to foster an understanding of the relation between both legitimacy scales of nodally-oriented policing.

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