

Bachelor Thesis European Studies

Cross-border traffic police enforcement: A descriptive and explanatory crosssectional study on the role of the EU's fight against the 'three main killers' on EU roads in the joint control operations of the police forces of Lower Saxony (GER) and Oost-Nederland (NL)

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List of Abbreviations

a.m. Ante meridiem

Art. Article

BAC Blood Alcohol Concentration

BBR Blood/Breath Ratio

BrAC Breath Alcohol Concentration

CAPTIVE Common Application Of Traffic Violations Enforcement

DDO Donkere Dagen Offensief

DLR Dienst Landelijke Recherche

DNA Deoxyribonucleic Acid

ed. Edition

ETSC European Traffic Safety Council

EU European Union

GDP Gross Domestic Product

GER Germany

GPT Grenzübergreifendes Polizeiteam

i.e. Id est

ILF Inspectie Leefomgeving en Transport

KLPD Koprs landelijke politiediensten

LKA Landeskriminalamt

NL Netherlands

n.d. No date

n.p. No pagination

OECD Organization for Economic Cooperation and Development

PACTS Parliamentary Advisory Council for Transport Safety

PAT Permanent Auto Team

p.m. Post meridiem

RBT Random Breath Testing

ROSPA The Royal Society for the Prevention of Accidents

RSAP Road Safety Action Programme

SBT Selective Breath Testing

SIS Schengen Information System

SQ Sub-question

StVG Straßenverkehrsgesetz

SUPREME Summary and Publication of Best Practices in Road Safety in

the Member States

SWOV Stichting Wetenschappelijk Onderzoak Verkeersveiligheid

TISPOL Traffic Information System Police

TLE Traffic Law Enforcement

VSI Verkehrssicherheitsinitiative

VRD Vehicle Registration Data

WHO World Health Organization

ZKI Zentrale Kriminalinspektion

ZPD Zentrale PolizeidirektionNiedersachsen

1 Abstract

This bachelor thesis essentially concentrates on the questions as to how far the EU's fight against speeding, drink-driving and non-use of seatbelts on EU roads plays a role in the joint control operations of the police forces of Lower Saxony (GER) and Oost-Nederland (NL) and, if it plays a role, as to how far the two forces under examination apply enforcement measures that are known to be best practice to fight the three hazardous traffic offences when conducting joint controls.

Besides an extensive literature review on the theoretical and empirical underpinnings of traffic law enforcement, the thesis comprises an analysis of the EU's most important policy documents aimed at improving the enforcement of speed, alcohol and seatbelt laws and regulations in and between the Member States. This document analysis serves as the basis for describing what actually constitutes the EU's against the 'three main killers' on EU roads.

After giving disclosure about enforcement measures that have proved to be effective in tackling the 'three main killers', the thesis examines the role that the EU's fight against speeding, drink-driving and the non-use of seatbelts plays in the joint control operations of the police forces of Lower Saxony and Oost-Nederland and sheds light on the enforcement measures that are de facto applied through the help of data derived from semi-structured face-to-face interviews (N=4) with key informants.

The thesis finds that the EU's fight against the 'three main killers' basically turns into a fight against only two 'killers' (speeding and drink-driving) during the joint control operations of the two police forces under examination. Additionally, and as a more interesting finding, the thesis discovers that due to legal regulations and the holistic nature of most of the joint control operations (that aim at contributing to road safety and fighting cross-border crime), the two forces sometimes sacrifice enforcement measures that are known to be best practice for the enforcement of traffic laws and regulations for the sake of apprehending criminals.

2 Introduction

Road traffic accidents cause concern and pose safety and security threats to people across the European Union (EU) as they claim the lives of tens of thousands of European citizens every year. In 2012 alone, almost 28,000 people were killed and around 25,0000 people were injured on roads in the then 27 Member States of the EU (European Commission, 2013a). During a seminar of the European Transport Safety Council (ETSC) on 24 April 2012, the European Commissioner for Transport Siim Kallas deemed that "it is unacceptable for 75 people to die every day on Europe's roads", and "that the main problem, ultimately, is enforcing the traffic laws and regulations" (p. 2).

Traffic Law enforcement (TLE) constitutes a means of preventing accidents from happening by way of persuading road users to comply with traffic laws and regulations. It is based on giving road users the feeling that they run too high of a risk of being detected and sanctioned when violating the laws and regulations (ETSC, 2013a). In order to reduce the number of road injuries and road deaths in the current 28 EU Member States, the Commissioner for Transport postulated that, "traffic law enforcement is an area where the EU clearly needs to work harder" (2012, p. 2). This applies in particular to traffic offences such as speeding, drink-driving and failure to wear seatbelts which are the three major traffic offences responsible for injuries and deaths on EU roads according to the concordant assessment of various European road safety stakeholders like ETSC, TISPOL and the European Commission (ETSC, 2011; TISPOL, 2011; European Commission 2013b).

In an attempt to improve the enforcement of speed, alcohol and seatbelt legislation in and between the Member States, the EU brought forward a number of policy documents, such as the White paper European transport policy for 2010: time to decide (European Commission, 2001), the European Road Safety Action Programme entitled Halving the number of road crash victims in the European Union by 2010: A shared responsibility (European Commission, 2003), the Recommendation 2004/345/EC on enforcement in the field of road safety (European Commission, 2004), and more

recently, an update of the Action Programme entitled *Towards a European road safety* area: policy orientations on road safety 2011-2020 (European Commission, 2010a).

In sum, these policy documents all fall within the category of soft-law EU policy making instruments without any direct legal clout that contain several non-binding stipulations on how the traffic authorities of the EU Member States should conduct the enforcement of speed, alcohol and seatbelt legislation. Inter alia, the non-binding stipulations envisage that the traffic authorities of the EU Member States should "apply what is known to be best practice in the enforcement of speed, alcohol and seatbelt legislation" (European Commission, 2004, p. 1). Furthermore, it is stated that "increased coordination and sharing of best practices help make enforcement and controls significantly more efficient", and that therefore "the principle of targeted control campaigns already organized in and between several Member States should be encouraged and generalized" (European Commission, 2010a, p. 6).

The request that "the principle of targeted control campaigns already organized in and between the Member States should be encouraged and generalized" (European Commission, 2010a, p. 6), indicates that the traffic authorities of some Member States obviously are already engaged with targeting traffic offenders concertedly. It seems, however, that these endeavors are not yet exhausted and that there is still room for enhancement.

On 24 October 2012 police forces of the Dutch police region of Oost-Nederland and the German federal states of Lower Saxony and North-Rhine Westphalia were involved in a highly intensified 24-hour-speed control (so-called 'Blitzmarathon'), that was organized across borders for the first time (TISPOL, 2012). Fokko Klok, the head of the Dutch traffic police praised the collaboration and stated that "the joint controls in Germany and the Netherlands help to ensure that less road death victims exist in both countries" (TISPOL, 2012). Moreover, the then Interior Minister of Lower Saxony, Uwe Schünemann, affirmed that "this cooperation in road safety between Lower Saxony and the Netherlands is an excellent example and transferable to many other fields of activity- with our control measures we want to save lives together" (TISPOL, 2012).

2.1 Goal of the research

By conducting a speed control operation across borders, the police forces of Lower Saxony and Oost-Nederland took an important step to comply with the European Commission's request for an increased coordination of control campaigns in and between EU Member States. It will, however, take more than just one nonrecurring large-scale joint control operation like the 'Blitzmarathon' in order to persistently assure a positive impact on road safety in the Dutch/German border region. It is therefore interesting to examine if the police forces of Lower Saxony and Oost-Nederland conduct further joint control operations that target drivers exceeding speed limits and if the enforcement of alcohol and seatbelt legislation also plays a role in the joint control operations of the two forces. Furthermore, it would be worthwhile to ascertain the extent to which the police forces of Lower Saxony and Oost-Nederland comply with the European Commission's recommendation to apply what is known to be best practice in the enforcement of speed, alcohol and seatbelt legislation.

3 Main research question and sub-questions

This bachelor thesis addresses the following main research question:

What role does the EU's fight against speeding, drink-driving and non-use of seatbelts play in the joint control operations of the police forces of Lower Saxony (GER) and Oost-Nederland (NL), and if it plays a role, how can potentially disclosed differences between enforcement measures that are known to be best practice in the fight against speeding, drink-driving and the non-use of seatbelts and enforcement measures that are de facto applied in the joint control operations be explained?

In order to be able to give a clear and structured answer to this main research question, it is divided into the following five sub-questions that are sequently answered in the course of this bachelor thesis report:

- SQ 1: What are the recent EU policy initiatives and plans to fight speeding, drinkdriving and the non-use of seatbelts on EU roads?
- SQ 2: To what extent do the police forces of Lower Saxony (GER) and Oost-Nederland (NL) engage in joint control operations that comply with the EU's policy plans to fight speeding, drink-driving and non-use of seatbelts?
- SQ 3: Which enforcement measures are known to be best practice in the fight against speeding, drink-driving and the non-use of seatbelts?
- SQ 4:To what extent do the enforcement measures that the two forces apply during their joint control operations comply to enforcement measures that are known to be best practice in the fight against speeding, drink-driving and the non-use of seatbelts?
- SQ 5:How can potentially disclosed differences between enforcement measures that are known to be best practice in the fight against speeding, drink-driving and non-use of seatbelts and enforcement measures that are de facto applied during joint control operations be explained by involved police officers?

4 Review of the literature/ Theoretical background

While it is important to accentuate that in 2012 considerably fewer people lost their lives in road traffic accidents across the European Union (EU) than twenty, or even ten, years ago (as indicated by Figure 1), road traffic accidents remain an acute problem as they still caused the premature death of about 28,000 people; the equivalent to the population of a medium-sized town (European Commission, 2013a). Apart from the unbearable human cost, road traffic accidents are also associated with high annual socio-economic costs of about 2% of EU countries' gross domestic product (GDP), corresponding to EUR 250 billion in 2012 (European Commission, 2013b). Thus, alongside legal and moral obligations, there is also a strong economic case for the EU and the Member States to strive towards a continuous reduction of road traffic accidents and the number of fatalities that result from them.

In an attempt to lend more weight to this issue, the European Commission set the

challenging target of halving the overall number of fatalities caused by road traffic accidents across the EU between 2010 (31,484 fatalities) and 2020 (indented: not more than 15,742 fatalities) (European Commission, 2010a). "A year-to-year reduction of at least 6.7% is needed over the 2010-2020 period to reach the target through constant progress in annual percentage terms" (ETSC, 2014, p. 13). However, as the average annual reduction since 2010 has only been 5.5% (ETSC, 2013), it becomes evident that for still reaching the challenging target, the EU and the Member States will have to go above and beyond current reduction trends. For this purpose, a key role can be seen in addressing the core elements of road safety, meaning those factors that are known to be significantly contributing to the occurrence of fatal road traffic accidents but where much progress remains to be achieved (OECD/ITF, 2009).

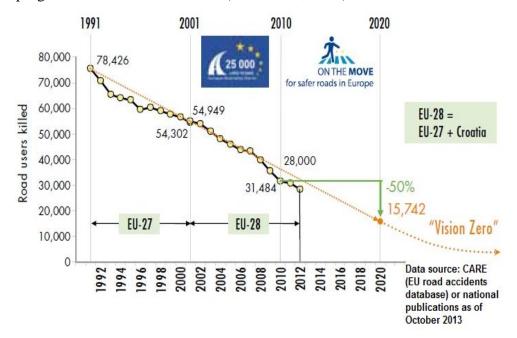


Figure 1- Number of road users killed on roads in the EU from 1991-2012 and targets for 2020 (DEKRA, 2014)¹

(Fatal) road traffic accidents rarely have a single unambiguous cause (Norman, 1962; Aworemi, Azeez et al., 2010; Zhang, 2010; OECD, 2002, a.o.). Instead, typically a

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[&]quot;The number of road users killed in road traffic accidents is defined as the number of deaths caused by road traffic accidents which occur within 30 days from the date of the accident. The number includes drivers and passengers, in motorized vehicles and on bicycles, as well as pedestrians involved in road traffic accidents" (Eurostat, 2013).

combination of contributing factors, forming a sufficient cause, leads to the occurrence of the traffic accident and the severity of its outcome (Haddon, 1980; Robertson, 1992; WHO, 2006; Odero, 2000). A contributing factor is a real circumstantial element that is present immediately before and at the time of the (fatal) road traffic accident (Botha & van der Walt, 2006). "It contributes to the occurrence of the accident and the severity of its outcome in a sense that the traffic accident would not have occurred and/or its outcome would not have been that severe without that particular factor being present, but the factor alone is an element that, by itself, cannot produce the accident and/ or its outcome" (Moodley & Allopi, 2008, p. 471). For example, although speeding may have contributed to the occurrence of a fatal road traffic accident, excessive speed is presumably not the only factor involved. Other factors that contributed to the occurrence of the accident, and/or aggravated its effects, could for example include driving on a narrow, curvy, icy road without wearing a seatbelt during a weekend night. Furthermore, not all road users who drive too fast for the given conditions, exceed the speed limit or consume alcohol before taking the wheel become involved in a (fatal) road traffic accident. "Excessive speed is a factor in increasing the odds of an accident, but speeding itself will not always cause an accident. Thus, investigations of (fatal) road traffic accidents (as for example done by police officers) are most productive when they identify as many of the contributing factors as possible rather than focusing on a primary cause" (Dixon & Clearwater, 1991, p. 222). Once the results of thoroughly conducted accident investigations are collected in large databases (such as national accident databases of the EU Member States), database analysis on the contributing factors' frequency of occurrence enables road safety experts to identify those factors that significantly contributed to (fatal) traffic accidents (Schick, have 2009). "If the factors that have contributed to (fatal) road traffic accidents are identified, it is possible to modify and improve the transportation system" (Opitz, Fessl et al., 2011, p. 23).

According to the European Commission, "road users' failure to respect the most important road traffic laws and regulations contributes to the occurrence of many fatal road traffic accidents in the EU" (European Commission, 2013a, p. 10). Based on the findings of an external mid-term impact assessment study of the European

Commission's 2001-2010 Road Safety Action Programme (RSAP) performed by ECORYS Transport and the Dutch SWOV Institute², the European Commission for example estimated, and still estimates, that speeding is a key factor in around 30% of all fatal road traffic accidents (European Commission, 2008; European Commission, 2013a). The second biggest contributing factor in fatal accidents on EU roads is drink-driving, which the Commission estimates to account for 25% of all road deaths. Additionally, the non-use of seatbelts is a factor in an estimated 17% of all deadly crashes (European Commission, 2008; European Commission, 2013a).

Even if these percentages cannot just be added up, as often, more than one of these factors plays a role in one single fatal traffic accident, speeding, drink-driving and the non-use of seatbelts are all together estimated to significantly contribute to more than 50% of all fatal road traffic accidents in the EU (European Commission, 2008). They are therefore designated as the 'three main killers' on EU roads by various road safety stakeholders such as ETSC, TISPOL and the European Commission (ETSC, 2011; TISPOL, 2011; European Commission, 2013b).

Given their estimated high involvement rate in road traffic accidents across the EU, huge road safety benefits, in terms of accident and casualty savings, could be attained by reducing the frequency and the extent of road users violating speed limits, alcohol limits and the obligation to wear seatbelts. According to theoretical estimates published by ETSC, "about 1,300 deaths could be prevented each year, if average driving speed dropped by only 1 km/h on all roads across the EU. Furthermore, if, as estimated by the European Commission, 25% of all road deaths, i.e. about 7,000 in 2012, are due to drink-driving, and at least 80% of these could have been prevented if all drivers had been sober³, then at least 5,600 deaths per year could be prevented by eliminating drink-driving. Additionally, another 900 deaths could have been prevented in 2012, if 99% of all vehicle occupants had been wearing seatbelts" (ETSC, 2014, p. 14). "Although one

Besides accident databases of several EU Member States, ECORYS Transport and the Dutch SWOV Institute also analyzed existing literature, as well as information derived from discussions with the European Commission and other road safety stakeholders for their assessment study (ECORYS Transport & SWOV, 2005)

³ "As indicated by the estimate that the risk of a fatal road traffic accident when driving with a blood alcohol concentration (BAC) of 0.5 g/l is 5 times that when sober" (ETSC, 2014, p. 14).

should be cautious about the accuracy of estimates, due to possible overestimation" (Vrolix & Vereeck, 2006, p. 13), it still seems clear that improving current levels of road users' compliance with speed limits, permissible alcohol limits and obligations to wear seatbelts could prevent a substantial number of fatal road traffic accidents and would therewith largely contribute to make the EU move closer to reach the ambitious target of halving the overall number of road deaths between 2010 (31,484 road deaths) and 2020 (indented: not more than 15,742 road deaths) (European Commission, 2010a). Strategies to improve road users' compliance with traffic laws typically involve three central elements, namely education, enforcement and engineering (commonly referred to as the three E's of road safety measures) (CAPTIVE, 2006).

"Education comprises all means to sufficiently equip road users to participate safely in traffic. These means include knowledge transfer, the training of skills, and influencing attitudes in all kinds of ways, e.g., by driver training, school education or information campaigns" (SWOV, 2013, p. 1).

Engineering refers to measures involving physical changes to the road infrastructure and/or the vehicle which try to induce compliant road user behavior (Musselwhite, Avineri et al., 2010). Regarding in-vehicle technology these measures may for example include alcohol interlock devices (often referred to as alcolocks), seatbelt reminders (SBRs) or speed limiters. In the realm of infrastructure-based technology these measures can for example embrace speed humps, chicanes, roundabouts or road narrowings.

4.1 Traffic Law Enforcement (TLE)

The final and most documented element of strategies to improve road users' compliance with traffic laws, and the focus of this thesis, is that of enforcement. According to the Oxford English online dictionary to "enforce" in the first instance means to "compel observance of or compliance with a law, rule, or regulation" (2014). According to the same source, it could also mean to "cause (something) to happen by necessity or force" (2014). Enforcement can therefore be defined as a process that seeks to compel compliance with a given law, rule, or obligation by force.

"In the road safety arena, enforcement usually means police enforcement, the actual police work of detecting traffic law violations, apprehending the offenders, and securing the evidence needed for their prosecution" (Kallberg, Zaidel et al., 2008, p. 21). However, the continual pursuit of compelling road users' compliance with prevailing traffic laws and the related intention to improve the road safety situation across the EU have never been the exclusive concern of the police. "In fact, police enforcement can only be effective if it operates in a supportive environment of laws, regulations, and a sensitive penal system" (OECD, 1999, pp. 81-82). These combined forces act to create the deterrence effect of police enforcement, both on the individual and on society at large (Hakkert, 1994). Consequently, the effectiveness of police enforcement cannot be seen in isolation from how the police collaborate with the other parties in the traffic law enforcement (TLE) system" (SafetyNet, 2009, p. 4). Although this thesis is primarily concerned with police enforcement, the following paragraph therefore offers a brief insight into all the components and the functioning of the entire TLE system. This step is considered necessary for the sake of better understanding the distinct contribution that the police can make to the functioning of a system aimed at controlling road users' behavior by preventive, persuasive and punitive measures in order to enhance the safe and efficient movement of road traffic (OECD, 1974).

Any TLE system is essentially comprised of three step-wise components, namely:

(1) Traffic laws and regulations, (2) police enforcement and (3) penalties and sanctions (Watson, Siskind et al., 2012). The foundation of any TLE system is traffic legislation (SWOV, 2013). Traffic legislation specifies the laws and regulations governing the use of the traffic system (Zaal, 1994). The most common understanding of traffic laws and regulations is that they guide road users in their behavior by defining certain legal limits (such as speed limits and permissible alcohol limits) and by imposing certain legal requirements or obligations (such as the obligation to wear seatbelts) on them (Goldenbeld, Heidstra et al., 2000). "In doing so, laws and regulations pursue a clear goal: Ensuring that the well-being and well-functioning of the entity where the laws and regulations apply to, is guaranteed" (Akkermans & Orozova-Bekkevold, 2007, p. 11). Obviously, traffic laws and regulations can only achieve their intended goal of

guaranteeing the well-being of road users and the well-functioning of the traffic system if they are complied with (Elliot & Broughton, 2004).

In an ideal world, with ideal road users who know and willingly accept the rationale of prevailing traffic laws and regulations, the sheer existence of these laws and regulations would make all road users voluntarily comply with them (OECD, 2006). However, such an ideal world does not exist. Everyday reality shows that despite the fact that all EU Member States having laws and regulations governing speed limits, alcohol use and seatbelts use⁴, these laws and regulations alone are not sufficient to make all road users voluntarily comply with them.

If traffic laws and regulations are not fully complied with voluntarily by the road users, while society is nevertheless of the opinion that certain unlawful behaviors should be prevented, then laws and regulations need to be upheld and enforced somehow (Wegman, 1992). For this purpose, legislature also enacts laws and regulations that provide certain authorities with the responsibilities, competences and powers to monitor traffic and to check for traffic law violations (Akkermans & Orozova-Bekkevold, 2007). The actual execution of this task, which forms the second component of any TLE system, "is primarily the responsibility of the police, although some areas have been decriminalized and are now the responsibility of local authorities" (ROSPA, 2004, p. 2). Since the focus of this thesis is on police enforcement, the important role that local authorities can play for the enforcement of traffic laws and regulations is admittedly acknowledged, but not further elaborated on in the course of this thesis.

"Typically, up to three different police forces can be identified who are responsible for monitoring traffic and checking for traffic law violations. These are a specialized central

[&]quot;The general speed limit for motorways in EU Member States is mostly 120 or 130 km/h. Germany does not have a general speed limit for motorways, but a recommended speed of 130 km/h. The general speed limit for rural roads in EU Member States is mostly 80 or 90 km/h and for urban roads 50 km/h, with a widespread use of 30 km/h zones in residential areas" (European Commission, 2014, n.p.) / All but two of the EU-28 Member States (Malta and the UK=0.8 g/l) reported a maximum legal BAC level of 0.5 g/l or below for the general population (WHO, 2014) / Under EU law, all drivers and passengers must wear a seatbelt in any seat fitted with one since 2006 (Directive 2003/20/EC of the European Parliament and of the Council, 2003).

traffic police force responsible for main national highways, a second unspecialized police force responsible for rural roads and small communities and a third local police force for larger communities" (Akkermans & Orozova-Bekkevold, 2007, p. 13). In carrying out their responsibility to monitor traffic and to check for traffic law violations, the police pursue two major objectives: (a) the prevention of traffic law violations, and (b) the detection of traffic law violations. "Police powers, procedures, and the type of evidentiary equipment used, all play a part in determining the extent to which these objectives can be reached" (ETSC, 2008, p. 1).

Once a traffic law violation has been detected by one of the abovementioned police forces, the way in which that violation is processed depends on whether it is dealt with under criminal or administrative law (which again depends on the type and/or the seriousness of the violation in question).

In the EU Member States, serious traffic law violations (especially violations where other road users are endangered or injured) are commonly dealt with under criminal law (Goldenbeld, Heidstra et al., 2000). Here, the detection of a traffic law violation by the police is usually followed by the prosecution and the (possible) sanctioning of the detected offender- performed by public prosecutor, and judge, respectively (Mäkinen, Zaidel et al., 2003). "The courts can impose a wide range of sanctions, from the loss or restriction of liberty (prison penalty) or rights (driving license), to financial penalties (day-fine, fine-unit, fines based on the offender's status). Provisions of legal procedure are used for controlling the validity of the detection and prosecution stages (possibility to lodge an appeal)" (European Commission, 2004, p. 2).

Minor traffic law violations (such as exceeding the speed limit by less than 30 km/h or seatbelt violations) are commonly dealt with administratively. Under administrative law, the three stages of detection, prosecution and sanctions are combined into a single one; there is no prosecution, no judgment and the violation is directly sanctioned (Goldenbeld, Heidstra et al., 2000). "Here, the whole enforcement process is under the control of police with legal and administrative support by other bodies" (Mäkinen, Zaidel et al., 2003, p. 14). It should be noted that compared to criminal sanctions, sanctions imposed under administrative law are much smaller in range. Administrative sanctions can apply the loss or restriction of rights (driving license) and they mostly use

financial penalties with fixed or unfixed amounts, but they can for instance not include liberty penalties (European Commission, 2004).

All three of the abovementioned components (to recall: (1) Traffic laws and regulations, (2) the actual police enforcement in situ and (3) sanctions and penalties) play an essential role in determining the impact and the effectiveness of any given TLE system. "However, it is the activities associated with the actual policing of traffic laws and regulations that are regarded as the central element of the system, providing the means of regulating compliance with the specified legislation and identifying those road users whose behavior requires some form of disciplinary action" (Zaal, 1994, p. 6).

4.2 Deterrence theory

After having revealed the core components of TLE systems, the following section of this thesis is devoted to present the theoretical background for understanding by which means and under which conditions TLE systems as a whole, and the police in particular, can be expected to be successful in obtaining their objective of securing and improving road users' compliance with traffic laws and regulations.

Numerous theories have been utilized to provide an explanatory framework for understanding road user behaviors, and in particular driver reactions to (police) enforcement activities. These have included psychological models, such as the theory of reasoned action (Fishbein & Ajzen, 1975), the social learning theory (Bandura, 1977), the theory of planned behavior (Ajzen, 1985), as well as economics-based models of criminal decision-making, such as the rational choice theory (Clarke & Cornish, 1985). "However, arguably the most common theoretical approach utilized to explain road users' compliance or non-compliance with traffic laws and regulations as a function of (police) enforcement is deterrence theory" (Bates, Soole & Watson., 2012, p. 96). Therefore, deterrence theory will also be applied as the theoretical backbone for this thesis.

"In criminology and social psychology, deterrence theory is used to describe the prevention of criminal behavior through the use of, or by the threat of, legal sanctions" (Tay, 2005, p. 210). "Deterrence theory suggests that people will commit a crime if it

gratifies them-if it is perceived as beneficial. Conversely, the assumption is made that people will not commit a crime if it brings unpleasant consequences- if it is perceived as costly" (Nagin, 2012, p. 70). In this context, deterrence is said to occur when people tempted to commit a crime are dissuaded from doing so because they fear the costs or unpleasant consequences of legal sanctions that might be imposed on them (Cusson, 1993).

In its classical form, as formulated by the two 18th century utilitarian philosophers Bentham and Beccaria (which still is the most widely understood model (Davey & Freeman, 2011)), deterrence theory posits that people evaluate legal threats according to the perceived sanction risk, which is determined by the perceived certainty, severity and celerity of legal sanctions (Watson, Siskind et al., 2012).

Thus, when the classical deterrence doctrine is applied to TLE, it is expected that road users can be deterred from violating traffic laws and regulations, if they believe that there is a high certainty that legal sanctions will be imposed on them if they violate traffic laws and regulations, and that the sanctions will be severe and delivered in a timely manner (Leal, Watson et al., 2009).

While the perceived severity and celerity of legal sanctions admittedly are important elements in the deterrence process, and the absence of them would seriously erode the efficacy of any deterrence-based TLE system, many empirical deterrence studies allow to draw the interference that the most important element for creating deterrent effects is the perceived certainty of legal sanctions (Arrigo, 2014; Elliott, 2008; Mendes, 2004; Nagin, 2011; Nagin & Pogarsky, 2000; Zaal, 1994). Zaal (1994) for instance set forth that "if road users believe that the certainty of receiving legal sanctions is low, then the effectiveness of the other deterrence elements can be compromised" (p. 28). Nagin (2011) supports this conclusion by stating that "it appears that road users do not become concerned (or as concerned) about quick and severe legal sanctions if they believe that it is far from certain that these sanctions will be imposed on them" (p. 71).

In TLE systems, the certainty of legal sanctions is conceptually and mathematically the product of at least two conditional probabilities, namely the probability of detection/apprehension given commission of a traffic law violation (usually by the

police) and the probability of imposition of legal sanctions (either through administrative or criminal procedures) given detection/apprehension (it should be noted that when traffic law violations are dealt with under criminal law then the probability of prosecution and the probability of conviction have to be included as intermediate steps between the probability of detection/apprehension of a traffic law violations and the probability of imposition of legal sanctions) (Nagin, 2013a). The more the actors involved in the TLE process succeed in increasing the probability of detection/apprehension (prosecution, conviction) and the probability of imposition of legal sanctions, the greater will be the deterrent effect of the certainty of legal sanctions (Ross, 1981).

Since, irrespective of whether traffic law violations are dealt with under administrative or criminal law, there is no possibility of conviction/prosecution (under criminal law procedures) and/or imposition of legal sanctions in the absence of detection/apprehension, "the probability of detection/apprehension is probably the most important of the certainty-related probabilities in the deterrence process" (Nagin, 2013b, pp. 98-99).

"Consequently, the conclusion that the certainty of legal sanctions, not the severity or celerity, is the more effective deterrent is more precisely stated as certainty of detection/apprehension and not the severity or celerity of legal sanctions ensuing from detection/apprehension is the more effective deterrent" (Nagin, 2013a, p. 199). Given their influence on the probability of detection/apprehension Durlauf & Nagin (2010) assume that for creating substantial deterrent effects, "the police are the most important set of actors" (p. 1). Wright (2010) reaffirms this conclusion by stating that "if there was 100% certainty of being detected/apprehended for committing traffic law violations, only few road users would do so" (p. 2).

This suggests, that in order to create substantial deterrent effects, TLE systems should primarily aim at instilling a feeling among road users that there is a high probability that they will be detected/ apprehended by the police if they choose to violate traffic laws and regulations. Once this is achieved, the deterrent effect can further be enhanced by increasing penalty severity and ensuring that the sanctions are initiated quickly (Davey & Freeman, 2010).

4.3 Assumed machanism of police enforcement

The direct line from legislation to compliance in Figure 2 represents those road users for whom legislation is sufficient to make them comply. Police presence and the various means and methods of active enforcement must be seen as a way to influence those for whom this is not the case (OECD, 1999).

As can be seen from Figure 2, police presence and enforcement activities first create an objective risk of detection/apprehension for traffic offenders. The actual, objective risk of detection/apprehension reflects the real probability of detection/apprehension caused by the actual level of policing activities together with the applied enforcement strategies, methods and instruments. "In turn, the objective risk has an important impact on the road users' perception of the probability of being detected/apprehended for traffic law violations (the subjective risk)" (ETSC, 2011, p. 3).

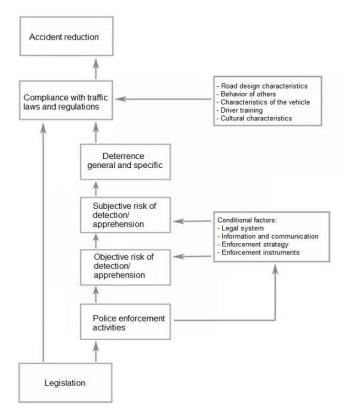


Figure 2- Model of the mechanism of police enforcement (Mäkinen, Zaidel et al, 2003, p.17)

"The subjective risk of detection/apprehension is the road users' own more or less

conscious and less explicit judgment of the possibility of getting detected/apprehended for traffic law violations" (Janitzek, Brenck et al., 2009, p. 33). Besides specific police enforcement strategies, methods and instruments, this subjective risk of detection/apprehension can further be increased by publicity campaigns and attention to enforcement activities in the media (information and communication) (OECD, 2006). It is assumed that if the interaction of police enforcement, publicity campaigns and attention to enforcement activities in the media succeed in making road users believe that there is a high probability that they will be detected/apprehended in the event of them violating traffic laws and regulations, then it is highly likely that the desired deterrent effect will be produced and that road users will avoid committing offences (Zaal, 1994).

Regarding deterrence, a distinction must be made between general deterrence effects for road users who have not yet been detected/apprehended and sanctioned and for road users who were actually detected/apprehended and subsequently sanctioned. The aim of general deterrence is to motivate all road users not to violate traffic laws and regulations by creating a credible threat that they will be detected/apprehended and sanctioned if they violate traffic laws and regulations. "It is immaterial whether such a threat actually exists; it is only necessary that road users perceive that it does" (Joscelyn & Jones, 1980, p. 5).

The aim of specific deterrence is to improve the attitudes and behaviors of road users once they are detected and apprehended by the police and subsequently sanctioned in order to prevent recidivism. "Here, the enforcement threat must be actual rather than perceived, since no sanctions can be imposed unless the road user is detected and/or apprehended" (Joscelyn & Jones, 1980, p. 5). Thus, general deterrence results from the perception of the public that traffic laws and regulations are enforced and that a risk of detection, apprehension and sanctioning exists when traffic laws and regulations are violated. Specific deterrence arises from actual experiences with detection/apprehension, (conviction, prosecution) and sanctioning of traffic offenders (Mäkinen, Zaidel et al., 2003).

"The general assumption underlying police enforcement is that it should primarily aim at general deterrence, which is foremost achieved by increasing the subjective risk of apprehension. The subjective risk of apprehension, and hence the effectiveness of police enforcement is larger if police enforcement is:

- Accompanied by publicity
- Unpredictable and difficult to avoid
- A mix of highly visible and less visible activities
- Primarily focused on times and locations with high violation (maximum feedback to potential offenders)
- Continued over a long period of time" (Wegman & Goldenbeld, 2006, p. 14).

"The last step in the chain of logic for the non-compliance/ deterrence based mechanism for improving safety, is that police enforcement can decrease non-compliance when it matters; that is with respect to behaviors, locations, times, road users and situations that matter for safety. This is not a trivial assumption, since almost all non-compliance events do not lead to accidents. It is possible for policing efforts to change non-compliance incidence or distribution yet not affect accidents. There have also been cases where police enforcement had no impact on non-compliance yet there was a change in accidents" (Zaidel, 2002, p. 12).

Hence, "the relationship between levels of police enforcement, on the one hand, and accident or casualty rates, on the other hand, is not easy to establish" (Elliott & Broughton, 2004, p. 7). A theoretical relationship is provided in Figure 3 in which the level of police enforcement is shown on the x-axis and accident/casualty rates on the y-axis.

As can be seen in Figure 3 the relationship between the level of police enforcement and accident/ casualty rates is non-linear. "Some forms of enforcement have more powerful effects than others, but in every case the relationship with accident/ casualty reductions is not linear: An S-shaped curve is hypothesized" (Bobevski, Hosking et al., 2007, p. 3). "At zero enforcement level, accidents and casualties are expected to be at their highest levels. Increases in enforcement will have no noticeable effect at first but at a certain

level, when road users become aware of the increased police presence they can be expected to modify their behavior (reduce their violations), so that the number of accidents and casualties would start to drop" (House of Commons Transport Committee, 2006, Ev 68). "Ostvik and Elvik (1990) have reported that increasing enforcement on a given road by less than three times does not have an impact on the subjective risk of detection/apprehension. A five-fold increase in enforcement has been found to increase the subjective risk of detection/apprehension and to subsequently result in a reduction in the percentage of offenders and a reduction in accidents by 20-30%" (Bobevski, Hosking et al., 2007, p. 3).

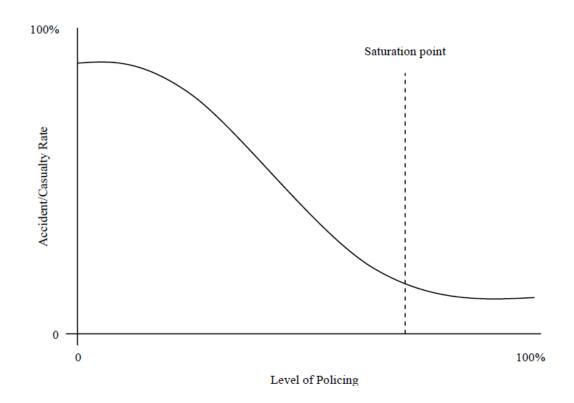


Figure 3-Theoretical relationship between level of policing and accident or casualty rates (Elliott & Broughon, 2004, p. 7)

In a later study, Bjørnskau & Elvik (1992) found that police enforcement levels have to be increased with a factor 2,3 or even 4, in order to achieve substantial road safety effects. From these studies it can thus be derived that as police enforcement increases, the numbers of accidents and casualties can be expected to decrease (Elliott &

Broughton, 2004). According to Elvik (2001) this is however only valid up to a certain point, after which increased enforcement would have little to no effect because of a saturation effect. Once the saturation point is reached, the additional savings in terms of road traffic accidents and casualties may not be worth the additional costs of extra enforcement (Bobevski, Hosking et al., 2007).

"The challenges for road safety researchers are to establish the levels of policing that are required to bring about the initial decrease in road traffic accidents or casualties to reach the saturation point, and to establish the accident and casualty reductions that can be achieved with these levels of policing" (House of Commons Transport Committee, 2006, Ev 68).

However, even if road safety researchers succeeded in establishing the levels of policing that are required to reach the saturation point, the capacity of the police to actually mobilize the corresponding levels of manpower might often still be limited by practical and financial constraints. As Zaidel (2002) puts it "a large and permanent increase in policing resources is not an attractive or feasible option in most countries" (p. 5). Mäkinen, Zaidel et al. (2002) confirm this view by stating that "no country could afford such massive police enforcement systems that would guarantee considerably better compliance rates than is presently the case" (p. 18).

A further complication is that "the police have many priorities (including violent crime, burglary and preventing terrorism) all of which are extremely important issues that concern the public" (ROSPA, 2004, p. 1). In view of the many other pressing problems facing police forces, TLE typically has low priority and consequently several European countries appear to be devoting fewer resources to traffic enforcement activities than in former times (ETSC, 1999).

In this context, the UK-based Parliamentary Advisory Council for Transport Safety (PACTS) even speaks about a "long-term marginalization of traffic enforcement within the police service as a whole" (2005, p. 5) and observes that "as policing changes to match changes within society and reconfigures its methods, priorities, discourses and strategies, traffic enforcement has lost the prominence and position that it previously held. There are fewer dedicated traffic policing officers; a smaller proportion of resources being dedicated towards traffic enforcement; less priority at both national and

local levels; and a progressive shedding of traffic enforcement tasks to other groups and agencies" (PACTS, 2005, p. 6).

"The recent financial crisis and cutbacks to public budgets across Europe creates unique challenges and requires all law enforcement authorities and agencies to consider new and smarter choices to deliver improved public services" (TISPOL, 2013, p. 1). While the trend across Europe seems to be that police resources are continuously reduced, the various challenges that the police face in the discharge of their daily duties seem to increase. In such a situation, it is indispensible for the police to use scare resources optimally and to apply what is known to be best practice in maintaining public order, preventing and detecting crime and also in enforcing traffic laws and regulations.

5 Methodology

5.1 Research purpose

"The classification of research purpose most often used in the research methods' literature is the threefold one of exploratory, descriptive and explanatory" (Saunders, Lewis & Thornhill, 2009, p. 139). "Exploratory research seeks to investigate an area that has been underresearched. Rather than testing hypotheses, this type of research starts to acquaint a researcher with a topic, and helps him or her to gain insights into the respective subject area that might be of potential use for further investigations" (Hesse-Biber & Leavy, 2011, p. 10).

The objective of descriptive research is to "portray an accurate profile of persons, events or situations" (Robson, 2002, p. 59). "It is concerned with making complicated things understandable. In social science, it often involves summarizing specific factual information into empirical generalizations, or summarizing details of events, characteristics, cases or processes" (Punch, 2006, pp. 34-35).

"Explanatory research seeks to explain social phenomena and the relationship between different components of a topic" (Hesse-Biber & Leavy, 2011, p. 10). "It too is concerned with making complicated things understandable, but on a different level. It aims to find the reasons for things, showing why and how they are what they are" (Punch, 2006, p. 34). Of course, the abovementioned types of research are not mutually

exclusive. Depending on how the researcher sets up the research, it may be both exploratory and descriptive or descriptive and explanatory (Slack & Parent, 2006).

The purpose of the thesis at hand is twofold, namely descriptive and explanatory. For the most part, the thesis is descriptive (sub-questions (1) to (4)) and to a lesser extent it is explanatory (sub-question (5)). The thesis is descriptive as information of the four most important EU policy documents will be analyzed and summarized. The approach here is not to comprehensively cover all provisions of these policy documents, but to address those provisions with direct application to the enforcement of speed, alcohol and seatbelt legislation in and between the Member States.

After having described the EU's policy plans and initiatives to tackle the 'three main killers' on EU roads, it is then described to what extent the police forces of Lower Saxony (GER) and Oost-Nederland (NL) engage in joint control operations that conform to the EU's plans to tackle the three 'main killers' on EU roads.

The descriptive part of the thesis continues by providing factual information about what is known to be best practice for the enforcement of speed, alcohol and seatbelt legislation.

After having described what the EU does to improve the enforcement of alcohol, speed and seatbelt legislation in and between the Member States, what actually happens during the joint operations of the two forces under examination and what is known as being best practice for the enforcement of alcohol, speed, and seatbelt legislation, the thesis then turns to its explanatory part. This step follows the logic that "good descriptions provoke the 'why ' questions of explanatory research" (de Vaus, 2001, p. 2). The explanatory section of the thesis is devoted to explain why not all of the 'three main killers' on EU roads are actively enforced (anymore) during the joint controls, and why certain enforcement measures that are designated as being best practice are not used in the joint control operations of the two forces under examination.

5.2 Research design

"The study at hand uses a cross-sectional research design. A cross-sectional study involves observations of a sample, or cross section, of a population or phenomenon that are made at one point in time" (Babbie, 2007, p. 102), during a period of days, weeks or months. Cross-sectional studies are designed to look at how things are in the present, without any sense of whether there is a history or trend at work.

Most cross-sectional studies actually are exploratory or descriptive in purpose, but there are also many explanatory studies that use a cross-sectional design (Babbie, 2007; Saunders, Lewis & Thornhill, 2009). "The terms cross-sectional design and cross-sectional survey are often used interchangeably. Researchers typically use one-time cross-sectional survey studies to collect data, but cross-sectional data can also be collected by interviews" (Liu, 2008, p.171)

5.3 Method of data collection

Data collection methods can be classified into qualitative and quantitative methods. A useful way to distinguish between the two methods is to think of qualitative methods as providing data in the form of words, and quantitative methods as generating data in the form of numbers and frequencies that can be transformed into useable statistics (Denscombe, 2007).

"Quantitative data collection instruments are questionnaires, standardized measuring instruments, ad hoc rating scales or observation schedules" (Punch, 2006, p. 52). Qualitative data collection methods include observation, participant observation, interviewing, focus groups and case studies (Denscombe, 2007).

The data collected for this thesis is primarily qualitative. Data sources for answering the first sub-question were the four most relevant EU policy documents, namely the *White paper European transport policy for 2010: time to decide* (European Commission, 2001), the European Road Safety Action Programme entitled *Halving the number of road crash victims in the European Union by 2010: A shared responsibility* (European Commission, 2003), the *Recommendation 2004/345/EC on enforcement in the field of*

road safety (European Commission, 2004), and more recently, an update of the Action Programme entitled *Towards a European road safety area: policy orientations on road safety 2011-2020* (European Commission, 2010a).

In order to be able to give an answer to sub-question (3), data was collected from the following publications: The *SUPREME* (Summary and Publication of Best Practices in Road Safety in the Member States) *Thematic Report: Enforcement* commissioned by DG TREN of the European Commission (2007), the second edition of the *Handbook of Road Safety Measures* (Elvik, Høye et al., 2009) and the *Recommendation* 2004/345/EC on enforcement in the field of road safety (European Commission, 2004).

For answering sub-questions (2), (4) and (5) qualitative data was obtained from interviews (N=4) with police officers from the two forces under examination. In order to be able to obtain rich information about the function and the character of the joint control operations of police forces of Lower Saxony (GER) and Oost-Nederland (NL), face-to-face semi-structured interviews were conducted with members of both police forces that were recorded with interview recording software on a personal computer ('Listen N Write').

Semi-structured interviews were chosen as the method of data collection, because it was perceived as important to be able to ask supplementary questions that add significance and depth to the data. Semi-structured interviews provide the researcher with the opportunity to probe answers, where he or she wants the respondents to explain, or build on, their responses (Saunders, Lewis & Thornhill, 2009, p. 324). For the case that the applied countermeasures of the police forces of Lower Saxony (GER) and Oost-Nederland (NL) do for instance not comply with the countermeasures that the SUPREME Thematic Report: Enforcement (SUPREME, 2007), the Recommendation 2004/345/EC on enforcement in the field of road safety (European Commission, 2004) and the Handbook of Road Safety Measures (Elvik, Høye et al., 2009) designate as being best practice in the enforcement of speed, alcohol and seatbelt legislation, use was made of the opportunity to probe answers and make the respondents explain why this is the case.

The following pre-determined set of questions was covered in all interviews:

- What are the objectives of the joint traffic control operations conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL)?
- What kind of joint control operations are currently conducted in which the enforcement of speed, alcohol and seatbelt legislation play a role?
- How are the joint control operations organized and how often do they take place?
- What kind of enforcement measures are applied in the joint control operations to fight speeding, drink-driving and the non use of seatbelts?

The study comprises of 30-90 minute face-to-face semi-structured interviews with four police officers of different ranks (German police officers N=3, Dutch police officer N=1). All interviews were held in the office premises of the police officers' respective police station. The interviews were conducted until clear, persistent themes were identified and the author of this thesis felt satisfied that the questions had been answered in depth and saturation was reached.

Interviews were conducted with the following participants:

- Martin Piepmeyer: Police chief inspector and coordinator international relations of the police administration Osnabrück, Lower Saxony/Germany
- Martin Stallkamp: Police chief inspector of the police administration Osnabrück,
 Lower Saxony/Germany
- Karl-Heinz Brüggemann: Executive police director of the police administration Emsland/Grafschaft Bentheim, Lower Saxony/Germany
- Hans Bijkerk: Superintendent of the infrastructure division of the police force of Oost-Nederland/ Netherlands

5.4 Sampling technique

The sampling technique used for this study was purposive sampling. According to Babbie (2007), purposive sampling is "a type of nonprobability sampling in which the units to be observed are selected on the basis of the researcher's judgment about which ones will be the most useful or representative" (p. 184). The interview participants were selected based on their particular knowledge about the joint control operations of the two police forces under examination. Due to the fact that all of the participants are responsible for the organization of the joint control operations of the police forces of Lower Saxony and Oost-Nederland and/or are oftentimes personally present during the joint control operations, they all were designated as being the most useful and representative informants for the purpose of this study.

5.5 Conceptualization/Operationalization

The EU's fight against the 'three main killers' is conceptualized as plans made and initiatives taken at EU level to improve the enforcement of traffic laws related to speed, alcohol and seatbelts. The EU clearly recognizes the role of traffic enforcement in improving road safety and several enforcement-related measures have been proposed. This thesis covers the enforcement-related provisions of the following policy documents: The White paper European transport policy for 2010: time to decide (European Commission, 2001), the European Road Safety Action Programme entitled Halving the number of road crash victims in the European Union by 2010: A shared responsibility (European Commission, 2003), the Recommendation 2004/345/EC on enforcement in the field of road safety (European Commission, 2004), and more recently, an update of the Action Programme entitled Towards a European road safety area: policy orientations on road safety 2011-2020 (European Commission, 2010a).

Joint control operations of the police forces of Lower Saxony (GER) and Oost-Nederland (NL) are throughout the bachelor thesis conceptualized as concerted control activities, involving personnel and equipment from both police forces. These joint control operations encompass the so-called 'East-West Search' (Ost-West-Fahndung),

the 'Corridor Search' (Korridorfahndung), the so-called 'Dawn-Operation' (Operatie Ochtendgloren'), the so-called 'Blitzmarathon' (like it was for the first time organized on 24 October 2012), and the work of the cross-border police team in Bad Bentheim (GPT: Grenzübergreifendes Polizeiteam)

A commonly agreed definition of what constitutes best practice to tackle speeding, drink-driving and the non-use of seatbelts is not available. However, best practice in this regard obviously refers to a specific police enforcement measure that has proven to be successful- successful in terms of bringing about a sustainable reduction in the number of road traffic accidents, accident victims and, in particular, in the number of fatalities. The SUPREME Thematic Report: Enforcement (SUPREME, 2007), the Recommendation 2004/345/EC on enforcement in the field of road safety (European Commission, 2004) and the Handbook of Road Safety Measures (Elvik et al., 2009) contain several examples of what can be perceived as being best practice to tackle the 'three main killers' on the road.

5.6 Data analysis

As has been indicated earlier, the semi-structured face-to-face interviews were recorded with interview recording software on a personal computer ('Listen N Write'). The recorded audio files were subsequently transcribed verbatim. It should be noted that the interviews with the German police officers were held in German language, while the interview with the Dutch police officer was held in a mix of Dutch and German language. The German and Dutch/German transcripts were translated into English with best knowledge and conscience of the author of this bachelor thesis.

For the analysis of the transcripts, the thematic analysis-approach was chosen. According to Mills, Durepos & Wiebe (2010) "thematic analysis is not a research method in itself, but rather an analytic approach and synthesizing strategy used as part of meaning-making process of many research methods" (p. 2). Thematic analysis can be used to manage and to make sense of large volumes of data in order to systematically gain knowledge and empathy about a person, an interaction, a group, situation or organization (Komori, n.d.). "The basic analytic strategy used in thematic analysis is

coding, a process of closely inspecting text to look for recurrent themes, topics, or relationships, and marking similar passages with a code or label to categorize them, that enables the researcher to build a complex descriptive or explanatory analysis of the case or multiple cases" (Mills, Durepos & Wiebe, 2010, p. 3). Thematic analysis is a highly inductive strategy in which themes emerge from the data that is gathered and are not imposed or predetermined by the researcher (Komori, n.d.).

After the transcripts have been translated into English, they were printed, carefully read and notations (by hand) were made in the margins. Based on the notations, the researcher created a coding guide that underwent several iterations. Once the coding guide was complete, the researcher divided the transcripts and coded according to the previously determined coding guide. From the codes, the researcher identified predominant themes and patterns which emerged from the data. These predominate themes and patterns then served as the answers to the research questions (2), (4) and (5).

For answering research questions (1) and (3), the researcher made use of a document analysis. Data sources for the answer to research question (1) were the *White paper European transport policy for 2010: time to decide* (European Commission, 2001), the European Road Safety Action Programme entitled *Halving the number of road crash victims in the European Union by 2010: A shared responsibility* (European Commission, 2003), the *Recommendation 2004/345/EC on enforcement in the field of road safety* (European Commission, 2004), and more recently, an update of the Action Programme entitled *Towards a European road safety area: policy orientations on road safety 2011-2020* (European Commission, 2010a).

Data sources for the answer to research question (3) were The SUPREME Thematic Report: Enforcement (SUPREME, 2007), the Recommendation 2004/345/EC on enforcement in the field of road safety (European Commission, 2004) and the Handbook of Road Safety Measures (Elvik et al., 2009).

Document analysis is a form of qualitative research in which data is examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). Analyzing data stemming from documents

incorporates coding the content into themes similar to how interview transcripts are analyzed.

5.7 Limitations of this study

All studies have limitations. This one is no exception. Qualitative research in general, and the use of semi-structured interviews as a qualitative research method in particular, is often "criticized as being biased, small-scale, anecdotal and/or lacking rigor; however when it is carried out properly it is unbiased, in depth, valid, reliable, credible and rigorous. In qualitative research there needs to be a way of assessing the extent to which claims are supported by convincing evidence. Although the terms reliability and validity have been associated with quantitative research, increasingly they are being seen as important concepts in qualitative research as well" (Anderson, 2010, p. 2).

For instance, the lack of standardization in semi-structured interviews may lead to concerns about reliability. Reliability is a matter of whether a particular technique, applied repeatedly to the same object, yields the same results each time (Babbie, 2007, p. 143). One response to the issue of reliability is that findings derived from non-standardized research methods, such as semi-structures interviews "are not necessarily intended to be repeatable since they reflect reality at the time they were collected, in a situation which may be subject to change" (Saunders, Lewis & Thornhill, 2009, p. 326). As cross-border police operations are complex and dynamic processes that might change over time (changes in police tactics, focus areas, equipment, personnel, etc.), it is conceivable that other researchers yield different results when they replicate the study at a much later point in time. If, however, other researchers repeat the study in the relatively near future, the author of this thesis is convinced that they would find similar results.

In quantitative terms, "validity refers to whether a measurement instrument actually measures what it is purported to measure" (Babbie, 2007, p. 153). Hammersly (1992) provides a qualitative perspective: "An account is valid or true if it represents accurately those features of the phenomenon that it intended to describe, explain or theorize" (p. 69). The success and validity of describing and explaining a phenomenon through the

help of semi-structured interviews thus rests on the extent to which the respondents' insights and opinions are truly reflected. Therefore, for ensuring a high degree of validity when conducting qualitative semi-structured interviews, the following applies: "In order to understand other persons' constructions of reality, we would do well to ask them...and to ask them in such a way that they can tell us in their terms (rather than those imposed rigidity and a priori by ourselves) and in a depth which addresses the rich context that is the substance of their meanings" (Jones as cited in Punch, 2014, p. 144). As can be seen from this quotation, on the one hand the validity and the quality of the information obtained from a semi-structured interview is largely dependent on the interviewer, who should clearly avoid an interview bias. The author of this thesis is convinced that this condition has largely been fulfilled.

On the other hand, there is also an important role for the respondents to contribute to the quality and validity of the information that can be obtained from interviews. Strongly relying on the answers from informed police personnel might raise problems of validity if the respondents are lying or deliberately concealing information. While it can neither be entirely ruled out that the respondents of this study lied, nor that they concealed information (for instance due to police tactical reasons), the author of this bachelor thesis never had the impression that the respondents deliberately lied or concealed important information.

With a number of only four respondents (N=4), the study indeed has to cope with the reproach to be small-scale. One common criticism levied at qualitative research is that the results may not be generalizable to a larger population if the sample size is small (and if the subjects were not chosen randomly) (Hancock, 1998). For this study this is not a mayor problem, since the original research purpose of this bachelor thesis was to gain an in-depth understanding of the specialness of the joint control operations conducted by the police forces of Lower Saxony and Oost-Nederland and not to generalize these insights to larger (police-) populations.

Reproaches that the sample size might still be too small for the stated purpose of the research are refuted by arguments of data saturation. The author of this thesis is convinced that no further interviews would have generated new information or insights.

A further limitation of this study is that cross-border policing in the road safety area has according to the author's knowledge remained a largely unresearched area, an untrodden territory. As a consequence, studies on which one may rely for the corroboration of one's own findings were not available.

After having provided the relevant background information, the theoretical aspects of TLE and police enforcement, as well as the methodological proceeding and limitations of the bachelor thesis, the following section turns to answer the first sub-question of the thesis. To recall, the first sub-question is:

6 SQ 1: What are the recent EU policy initiatives and plans to fight speeding, drink-driving and the non-use of seatbelts on EU roads?

In 2001, the European Commission presented its *White Paper-European transport* policy for 2010: time to decide, in which it proposed 60 measures to overhaul the EU's transport policy in order to make it more sustainable and avoid the huge economic losses due to congestion, pollution and road traffic accidents (EurActiv, 2006).

With respect to road safety, which is only a small part of the document, the White paper signified that "of all modes of transport, transport by road is the most dangerous and the most costly in terms of human lives, accounting for 40,000 deaths in the European Union each year" (European Commission, 2001, p.15).

Reproaching that "efforts to prevent road traffic accidents are still woefully inadequate" (European Commission, 2001, p. 65), the Commission claimed that the European Union must, over the next 10 years, pursue the ambitious goal of reducing the number of deaths on the road by half over the next 10 years" (2001, p. 66) and stated that "it plans to marshal efforts for reaching this target" (2001, p. 66).

However, the White Paper also conceded that despite the fact that the Maastricht Treaty provided the Community with the legal means to establish a framework and introduce regulatory measures in the field of road safety, "some Member States still fail to recognize the obvious need for a proper European road safety policy, and invocation of

the principle of subsidiarity is making that Community action difficult" (Commission, 2001, p.65).

Against this backdrop, the Commission acknowledged that "responsibility for taking measures to reach the desired reduction primarily rests with Member States and their various local and national authorities, while the European Union is committed to drive forth the exchange of good practice, the promotion of new technologies and the harmonization of penalties to improve safety" (2001, p. 66).

"Regarding target areas for investing the most effort to obtain the most gain in safety, the document considered mainly road user behavior in general and drink-driving and speeding in particular, and offered harmonization of regulations and their control as the prime EU level mechanism for influencing road user behavior. Much of the harmonization text is concerned with cross-border traffic and the wish to have the same penalties imposed on non-complying out-of state road users, as on local road users" (Zaidel, Jayet et al., 2008, p. 25).

All in all, as a strategic policy document, the White paper was innovative and clear on one point- the setting of an EU road safety target; a target that constitutes a serious collective undertaking to reduce the number of road deaths rather than a legal requirement. Given that the responsibility for road safety is shared between different levels of government, the Commission was fully aware that "it is impossible to rely solely on activities implemented at EU level in order to achieve the ambitious road safety target" (2001, p. 67).

As a soft law instrument without any legally binding force, the main aim of the White Paper was to provide motivation for EU bodies, Member states, regional and local authorities to launch shared activities and to do their best to progress towards the target of halving the number of road deaths between 2001 and 2010.

In 2003, the European Commission published the European Road Safety Action Programme (RSAP) entitled *Halving the number of road crash victims in the European Union by 2010: A shared responsibility*. In the document the Commission stated that "each year, still more than 40,000 people die and 1,700,000 are injured in the European

Union as a result of road traffic accident" (2003, p. 4). The Commission deemed this situation "as socially unacceptable and difficult to justify to the citizen" (2003, p. 5).

Therefore, the Commission reiterated its postulation "that the European Union should set itself the target of halving the number of road deaths by 2010" (2003, p. 4). However, it also mentioned again that, "despite the existing road safety target and despite the fact that the Maastricht Treaty clarified the legal means available to the Community to establish a framework to act, the Member States have been highly reluctant to take action at Community level" (European Commission, 2003, p. 5). According to the Commission, the Member States too often invoke the principle of subsidiarity as a means of avoiding the adoption of specific measures at EU level (2003, p. 7). Therefore, "the Commission intends to apply the principle of subsidiarity in a strict manner so that everyone concerned, at all levels, can have a clearly identified framework of action in order to be able to play a full part (European Commission, 2003, p. 7).

Claiming that "all the Member States are faced with the same problems" (European Commission, 2007, p. 7), the European Commission called for coordinated action, focused on common objectives, covering the local, regional, national and Community levels in the domains of:

- Road user behavior (enforcement, driving licenses, campaigns)
- Vehicle safety (technical inspection, passive and active safety)
- Infrastructure safety
- Professional transport
- Accident investigation and analysis (2003, pp. 4-5).

Regarding road user behavior, the problems that are predominantly mentioned in the RSAP are the following:

- Non-compliance with basic road safety rules such as drink-driving, speeding and the failure to wear seatbelts and helmets
- Use of illicit drugs and 'bad for driving' medications
- Dangerous driving

• Evasion of driving license restrictions and traffic penalties by non-resident drivers, especially professional drivers (European Commission, 2003).

According to the European Commission, "the failure of road users to comply with basic road safety legislation (relating to drink-driving, wearing seatbelts or crash helmet, and speeding) is the main cause of serious accidents", and "action focusing on these three factors could help to meet more than half the target of halving the number of people killed on the roads" (2003, p. 14). As an important step to achieve a significant improvement in compliance with the rules by road users, the Commission considered it important "to combine police checks with education and awareness campaigns for road users" (2003, p. 14).

Taking into account that "the actual work in traffic policing and campaigns must be done, of course, by each Member State in its territory" (Zaidel, Jayet et al., 2008, p. 29), the Commission intended to deliver aid to the Member States by engaging in the following activities:

- propose to Member States a generic TLE approach
- propose good practice guidelines for police checks (how to conduct speed, drink driving and seatbelt controls)
- support EU-wide coordinated information campaigns to raise a sense of awareness about the consequences of not complying with road safety laws and regulations and about enforcement
- propose methods (harmonization and cross-border TLE cooperation) for better control over road users in general, and over professional drivers specifically (European Commission, 2003).

As yet another soft law policy instrument without any binding legal effect, the Commission's RSAP was in the first place intended to serve as stimulus and a catalyst for strengthening EU, national and local efforts to improve road safety. To this end, the Commission proposed the ambitious target to halve the number of road deaths until 2010 and proposed a number of measures how this target could possibly be reached. In

due consideration to subsidiarity issues, however, the Commission's proposals for the actual realization and implementation of these measures often remained vague.

In its *Recommendation* 2004/345/EC of 6 April 2004 on enforcement in the field of road safety (OJ L 111/75 of 17.4.2004), the European Commission put forward non-binding recommendations on how the Member States should improve their traffic law enforcement policies with regard to speeding, drink-driving and non-use of seatbelts. According to the Commission, these three non-compliance behaviors "are the main causes of fatal accidents" and "cutting back these causes of deaths on the roads would achieve more than half of the intended 50% reduction in fatalities" (2004, Art. 2). As "it appears from research that enforcement is an important and effective way of preventing and reducing accidents, deaths and injuries" (European Commission, 2004, Art. 3), the Commission urged Member States to adopt and implement thirteen TLE action points. The most important action points, which imposed new demands to most of the Member States at that time are listed below:

Generic approach to TLE

- Set up a national enforcement plan containing the measures they intend to take for the implementation of the Commission's Recommendation
- Evaluate regularly and adapt the national enforcement plan in accordance with relevant developments
- Apply as a general policy that detected violations are followed-up by the infliction and execution of a sanction and/or a remedial measure
- Ensure that sanctions are more severe in the case of repeated serious violations committed and that sanctions include the possibility of suspension or withdrawal of the driving license and of immobilization of the vehicle for serious violations
- Ensure that serious or repeated offences by a non-resident driver are reported to the competent authorities of the (other) Member State (European Commission, 2004)

Best practice enforcement methods with regard to speeding, drink-driving and non-use of seatbelts

- Ensure that automated speed enforcement equipment is used to check speeding on motorways, secondary roads and urban roads, and ensure they are carried out regularly on stretches of roads where non-compliance occurs regularly and where this brings about an increased risk of accidents
- Ensure the application of random breath testing (RBT) with an alcohol screening device as a leading principle for surveillance of drink-driving. Ensure that officers carrying out random breath testing checks use evidential breath test devices whenever they suspect drink-driving
- Ensure that intensive enforcement actions concerning the non-use of seatbelts with a duration of at least two weeks take place at least three times a year, and ensure that the use of seatbelts is enforced in every individual case where non-use is observed and the car is being stopped
- Ensure that these enforcement actions are combined with information to the public, which will be given in the form of publicity campaigns (European Commission, 2004)

Administrative requirements and coordination with other Member States and the European Commission

- Member States assist one another in matters of cross border violations, exchange of best practice information and report to the Commission through a designated enforcement coordination point in each state
- Member States report to the Commission, every two years, all the detailed information about the enforcement plan and its implementation and report the outcomes of the evaluation of the national enforcement plan (European Commission, 2004)

The adoption of the *Recommendation* 2004/345/EC of 6 April 2004 on enforcement in the field of road safety (OJ L 111, 17.4.2004) must be seen as the consistent continuation of the Commission's fight for increased road safety throughout the EU.

While the White Paper-European transport policy for 2010: time to decide and the Road Safety Action Programme entitled Halving the number of road crash victims in the European Union by 2010: A shared responsibility admittedly initiated the fight for increased road safety by calling upon EU bodies, Member States, regional and local authorities to pursue the ambitious goal of halving the number of road deaths by 2010, proposals for how this goal could be achieved rather remained vague. In its Recommendation 2004/345/EC, however, the Commission provided concrete best practice measures for the enforcement of traffic laws and regulations in the priority areas of speeding, drink-driving and non-use of seatbelts. Despite having issued yet another soft law instrument, that did not constitute any legal obligation for the Member States to implement it into their legal systems, the Commission clearly expected Recommendation 2004/345/EC to be followed by the Member States. This can be seen in the fact that the Commission reserved the right to "submit a proposal for a directive aiming at achieving the objective of 50% reduction, in the event that the improvements described in the Recommendation are not achieved" (European Commission, 2004, Art. 5).

In its *Proposal for a Directive of the European Parliament and of the Council facilitating cross-border enforcement in the field of road safety-Full Impact Assessment (COM(2008) 151)*, the European Commission concluded that "since a Recommendation is not legally binding, it has failed to result in an EU-wide introduction of best enforcement methods" (2008, p. 11). While the *Recommendation 2004/345/EC* has certainly helped to raise the profiles of TLE in the EU Member States and some improvements in road safety have been achieved (Orozova-Bekkevold, Martinez & Akkermans, 2007), the European Commission criticized that "a structured and systematic process all over the EU towards more stringent enforcement has not yet taken place", and that "the practice under the Recommendation did not lead to the cooperation necessary to sufficiently improve enforcement practices throughout the EU" (2008, p. 11).

Fearing that "maintaining the current situation as well as taking non-regulatory measures would mean that existing problems on road safety enforcement would be

unsolved", the Commission announced that further "actions are needed on both issues, cross-border enforcement of road traffic penalties and efficient enforcement practices in the Member States" (2008, p. 30).

As under the principle of subsidiarity, however, the EU Member States enjoy a large degree of autonomy in the way they wish to act to improve road safety, which is in particular true when it comes to action in the fields of human behavior and infrastructures (European Commission, 2008), the Commission acknowledged that setting minimum requirements and standards for the quality and the intensity of enforcement practices in the Member States in the form of a directive "is not practicable" (European Commission, 2008, p. 30).

Therefore, the Commission's proposal for legislative action mainly provided for a "directive for setting up an information exchange system and appropriate cross-border cooperation between competent authorities to identify non-resident holders of vehicles who have committed an offence" (European Commission, 2008, p. 16)- an area that according to the Commission "falls outside the competence of the different Member States as they cannot prosecute offenders outside their territories" (2008, p. 30) and where action taken at Community level thus clearly creates added value.

Although the ambitious road safety target of halving the number of road traffic fatalities between 2001 and 2010 has not been fully achieved (as is also indicated by Figure 1 of this report), it has still helped to encourage EU Member States to become more proactive in improving road safety and to reduce the number of road traffic fatalities. While, in fact, the number of road traffic fatalities only decreased by around 43% between 2001 and 2010 (ETSC, 2011), this development can still be considered "as a success for road safety in the European Union" (Bax, 2011, p.6). Since, however, there is still an unacceptably high number of preventable deaths to be mourned on roads throughout the EU, the European Commission was not willing to rest on this success. In 2010, the European Commission therefore issued an update of the European Road Safety Action Programme entitled *Towards a European road safety area: policy orientations on road safety 2011-2020* that aims "to provide a general governance framework and challenging objectives which should guide national and local strategies

to further improve road safety for the period between 2010 and 2020" (2010a, p. 2). "In line with the principle of subsidiarity, actions should be implemented at the most appropriate level and through the most appropriate means" (European Commission, 2010a, p. 2). A major objective of the policy orientations is "to halve the overall number of road deaths in the EU by 2020 compared to 2010" (European Commission, 2010a, p. 4). As the policy orientations constitute yet another soft law policy-making instrument, this target is once more not mandatory for the Member States-"they are encouraged to contribute" and "should concentrate their efforts on areas where their performance is the lowest" (European Commission, 2010a, p. 4).

As, in view of the European Commission, "enforcement remains a key factor in creating the conditions for a considerable reduction in the number of deaths and injuries" (European Commission, 2010a, p. 6), enforcement is also an integral part of the policy orientations 2011-2020. The European Commission acknowledged that "the full potential of a European enforcement strategy was indeed not reached during the previous program, in particular with the lack of progress on the Commission's proposal concerning cross-border enforcement" (European Commission, 2010a, p. 6). Therefore, the European Commission suggested that a future European enforcement strategy should be build on the following axes:

Cross-border exchange of information in the field of road safety

• "The work initiated in 2008 on the proposal for a Directive facilitating enforcement in the field of road safety should continue (European Commission, 2010a, p. 6)

Targeted enforcement campaigns in and between the Member States

• "Increased coordination and sharing of best practices help make enforcement and controls more efficient. The principle of the targeted control campaigns already organized in and between several Member States should be encouraged and generalized" (European Commission, 2010a, p. 6).

Vehicle technology to assist enforcement

- "Technological developments, such as in-vehicle systems providing real-time information on prevailing speed limits could contribute to improve speed enforcement (European Commission, 2010a, p. 6)
- "With respect to drink-driving, penalties should be accompanied by preventive measures. Thus the Commission will examine to what extent measures are appropriate for making the installation of alcohol interlock devices in vehicles compulsory" (European Commission, 2010a, p. 6)

National enforcement objectives in the Member States

• "The effectiveness of road safety policies is largely dependent on the intensity of controls on compliance with safety requirements. The Commission encourages setting national control objectives, to be integrated into national enforcement plans" (European Commission, 2010a, p. 7).

An essential step towards the endorsed European enforcement strategy was taken with the adoption of *Directive 2011/82/EU of the European Parliament and the Council of 25 October 2011 facilitating the cross-border exchange of information on road safety related traffic offences* (OJ L 288, 5.11.2011). Exempt from the United Kingdom, Ireland and Denmark that have opted out of being covered by any legislation adopted under Title V of the Treaty on the Functioning of the European Union (Area of Freedom, Security and Justice) (European Commission, 2013c), Member States had to transpose *Directive 2011/82/EU* into their national legislation by 7 November 2013 (ETSC, 2013)⁵.

"The Directive aims to ensure a high level of protection for all road users in the Union

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It should be noted that "in May 2014 the European Court of Justice ruled that the legal basis of *Directive* 2011/82/EU, which came into force in November 2013, was incorrect. The ECJ found that the measures proposed in the Directive do not concern prevention of crime as defined under the police cooperation rules, but rather road safety, which is a transport issue. However, given the importance of the law for road safety, the ECJ said that the current rules will stay in place while a new proposal is agreed. The Court has granted a one-year transition period, meaning the rules will remain in effect until May 2015" (ETSC, 2014a, n.p.).

by facilitating the cross-border exchange of information on road safety related traffic offences and thereby the enforcement of sanctions, where those offences are committed with a vehicle registered in a Member State other than the Member State where the offence took place" (OJ L 288, 5.11.2011, Art. 1). To this end, the Directive requested that "a system of cross-border exchange of information should be put in place for certain identified road safety related traffic offences, regardless of their administrative or criminal nature under law of the Member State concerned, granting the Member State of the offence access to vehicle registration data (VRD) of the Member State of registration" (OJ L 288, 5.11.2011, Art. 6). In the view of the European Parliament and the Council, "a more efficient cross-border exchange of VRD, which should facilitate the identification of persons suspected of committing a road safety related traffic offence, may increase the deterrent effect and induce more cautious behavior by the driver of a vehicle that is registered in a Member State other than the Member State of the offence, thereby preventing casualties due to road traffic accidents (OJ L 288, 5.11.2011, Art. 7).

In addition to the 'three main killers' on EU roads, namely, speeding, drink-driving and the non-use of seatbelts, the Directive also covers the following road safety related traffic offences: failing to stop at a red traffic light, driving under the influence of drugs, failing to wear a safety helmet, use of a forbidden lane and the illegal use of mobile phones or any other communication device while driving (OJ L 288, 5.11.2011).

The implementation of *Directive's 2011/82/EU* provision to set up a system allowing the enforcement authorities in the Member State where one of the abovementioned traffic offences has been committed to pursue and fine drivers of vehicles registered in another EU Member State "has a considerable life-saving potential across the EU" (ETSC, 2013c, p. 1). According to the assessment of ETSC, an effectively operating cross-border enforcement system "could save 350-400 lives a year" (ETSC, 2014, n.p.), thus contributing to the ambitious goal of halving the number of road deaths between 2010 and 2020.

As regards the other elements of the European enforcement strategy endorsed by the European Commission in its policy orientations 2011-2020, namely vehicle technology to assist enforcement, national enforcement objectives in the EU Member States and

targeted traffic control campaigns in and between the Member States, Member States often seem to be reluctant to accept EU policy (SWOV, 2011). Therefore, the setting of binding road safety targets has been politically unfeasible and developing obligatory road safety measures (vehicle technology to assist enforcement, targeted control campaigns in and between the Member States and the application of best practice enforcement measures) has been impossible (Bax, 2011, p. 11). Due to the fact that there are no binding legal instruments in the form of regulations, directives or decisions enacted on EU-level, the Member States are not obliged to adopt any of the remaining elements of the endorsed European enforcement strategy in their national road safety policies.

As an answer to the first research question, it is fair to conclude that, with the exception of *Directive 2011/82/EU of the European Parliament and the Council of 25 October 2011 facilitating the cross-border exchange of information on road safety related traffic offences* (OJ L 288, 5.11.2011), the EU's fight against the 'three main killers' on EU roads is mainly coined by so-called soft-law policy making. Taking into account that despite the fact that the Maastricht Treaty clarified the legal means available to the Community to establish a framework to act in the field of road safety, Member States "often seem to be reluctant to accept EU actions on road safety" (Bax, 2001, pp. 26-27). The invocation of the subsidiarity principle often makes Community action difficult and Member States as well as regional authorities enjoy a large degree of autonomy in the way they wish to act in order to improve road safety (especially when it comes to action in the fields of human behavior and infrastructures) (European Commission, 2006). Nevertheless, the EU, within the limits of its possibilities, has never tired of undertaking attempts to improve the road safety situation in the Member States.

The EU for instance clearly recognizes the role of traffic law enforcement in improving road safety and therefore several enforcement-related measures have been proposed in the White paper European transport policy for 2010: time to decide (European Commission, 2001), the European Road Safety Action Programme entitled Halving the number of road crash victims in the European Union by 2010: A shared responsibility (European Commission, 2003), the Recommendation 2004/345/EC on enforcement in

the field of road safety (European Commission, 2004), and more recently, an update of the Action Programme entitled *Towards a European road safety area: policy orientations on road safety 2011-2020* (European Commission, 2010a). Enforcement-related measures proposed in these policy documents for instance encompass road casualty reduction targets, appeals to set up national enforcement plans, appeals to apply what is known to be being best practice for traffic law enforcement and the request that the principle of targeted control campaigns already organized in and between the Member States should be encouraged and generalized. As these stipulations are however non-binding in nature, they did not culminate in a full implementation effect in all Member States.

Notwithstanding the absence of binding EU-legislation, several Member States have actually adopted or integrated some of the policy orientations 2011-2020 in their national road safety policies (SWOV, 2011). Independently of EU-level decisions, a vast number of EU Member States for instance regularly participates in multilateral traffic control campaigns that are increasingly organized under the aegis of TISPOL (Block, 2011). In an informal manner, the European network of police forces annually schedules several pan-European enforcement campaigns targeting drink- and drug driving, excessive and inappropriate speed and the failure to wear seatbelts in which the police forces of all the TISPOL Member Countries (all EU Member States, Norway and Switzerland) are encouraged to take part (TISPOL, 2013).

On a smaller scale, bilateral traffic control operations in border regions have also expanded rapidly in recent years (Block, 2011). For instance, on 24 October 2012 police forces of the Netherlands and the two German federal states (Länder) Lower Saxony and North Rhine-Westphalia for the first time concertedly organized a so-called speed control marathon during which they were focusing on drivers exceeding the speed limit. Fokko Klok, the head of the Dutch traffic police praised the collaboration and stated that "the joint controls in Germany and the Netherlands help to ensure that less road death victims exist in both countries" (TISPOL, 2012). Moreover, the then Interior Minister of Lower Saxony, Uwe Schünemann, affirmed that "this cooperation in road"

safety between Lower Saxony, North Rhine-Westphalia and the Netherlands is an excellent example and transferable to many other fields of activity- with our control measures we want to save lives together" (TISPOL, 2012). As shown by this example, police forces of the Netherlands and Germany apparently conduct joint operations in the field of traffic enforcement that have the potential to improve the road safety situation in both countries. Nevertheless, it will take more than just one nonrecurring large-scale police operation like the speed control marathon in order to achieve a sustainable impact and to save lives on the road together persistently. Therefore it is interesting to examine if the accomplishments of the speed control marathon are actually transferred to other fields of activity and if Dutch and German police forces also conduct joint operations addressing the other two main risk factors on the road, namely drink- driving and failure to wear a seatbelt. Furthermore, it would be interesting to ascertain to what extent the two forces apply enforcement measures that are according to scientific research effective against the three main risk factors for road traffic accidents when conducting joint operations.

7 Organization of the police and traffic enforcement in Germany/Lower Saxony and the Netherlands/Oost-Nederland

The responsibility for traffic enforcement in Germany falls into the remit of the federal states (Länder) (Townsend, Achterberg & Janitzek, 2006). This is due to the federal constitutional system of the Federal Republic of Germany, which provides the states with the authority to maintain their own police forces, along with the right to pass legislation and exercise police powers (Federal Ministry of the Interior, 2015). In such a decentralized police system, "it is incumbent upon the ministry of internal affairs and sport of the respective federal states to hire and train police officers and to create an organizational framework for the various police tasks in the areas of public safety and the deployment of officers, crime control and prosecution, victim protection and crime prevention as well as road safety in order to fulfill the police duty" (Frevel & Kuschewski, 2009, p. 52).

As regards the enforcement of traffic laws and regulations, this implies that "each state

is autonomous to some degree and therefore develops its own strategies and traffic policing operations for which it can assign its own state police forces" (Lotte et al., 2008, p. 41). Varying enforcement strategies between the different federal states are for instance expressed in the fact that some states, such as "Lower Saxony or North-Rhine Westphalia, have set themselves a road fatality reduction target, while others have disregarded such a measure" (Townsend, Achterberg & Janitzek, 2006, p. 58). In its road safety initiative 2020 (Verkehrssicherheitsinitiative (VSI) 2020), that was brought into being in 2011, the Ministry of Internal Affairs and Sport of Lower Saxony for instance formulated the ambitious target of reducing the number of 540 road traffic casualties in that year by one third by the year 2020 (Polizei Niedersachsen, n.d.).

In view of the heterogeneity of the German traffic enforcement landscape, which makes the processes traffic police enforcement differ vastly within Germany, the author of this bachelor thesis perceives it as expedient to examine the joint enforcement endeavors of only one German federal state with its Dutch counterpart. As the bachelor thesis is devoted to figure out to what extent the EU's fight against the 'three main killers' on EU roads plays a role during the joint control operations of Dutch and German police forces, it seems to be rationale to focus on a federal state that shares a common border with the Netherlands. Since two German federal states fulfill this condition, namely Lower Saxony and North Rhine-Westphalia, the geographically larger federal state of Lower Saxony was selected for this bachelor thesis.

Within the federal state of Lower Saxony, six police directorates in the cities of Braunschweig (BS), Göttingen (GÖ), Hannover (H), Lüneburg (LG), Oldenburg (OL) and Osnabrück (OS) (see Figure 4) avouch the execution of basic police duties and take over the management of special police operations. In addition to that, they also fulfill important tasks in the realm of disaster management, fire prevention and civil protection.

Each police directorate disposes of a central criminal investigation unit (Zentrale Polizeiinspektion (ZKI)), which deals with serious criminal phenomena, such as gang crime, organized crime and corruption (Polizei Niedersachsen, 2014).



Figure 4- Police Directorates of Lower Saxony (Ministry of Internal Affairs and Sport of Lower Saxony, 2015, n.p.)

Furthermore, each police directorate consists of four to seven police departments (Polizeiinspektionen), which are responsible for the execution of basic police duties. In total, there are 33 police departments in the federal state of Lower Saxony. Subordinate to the 33 police departments, there are 87 precincts (Polizeikommissariate) and five highway patrol precincts (Autobahnpolizeikommissariate), which have a functional responsibility for emergency services and patrol duties, including road safety work, criminal investigations and prevention activities (Polizei Niedersachsen, 2015). The central police directorate of Lower Saxony, which is located in the city of Hannover, is responsible for the provision and the management of the riot police, the water police forces and the helicopter squadron. It is furthermore in charge of the

management of information-and communications technologies, the vehicle fleet and operating resources (Polizei Niedersachsen, n.d. a).

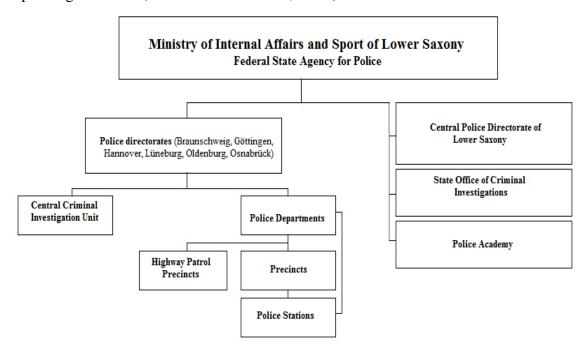


Figure 5- Organizational chart of the police of Lower Saxony (Polizei Niedersachsen, 2015)

The state office of criminal investigations (Landeskriminalamt (LKA)) is the central authority responsible for supervising the criminal investigation activities of Lower Saxony's police forces. It is furthermore in charge of guaranteeing the concerted cooperation of Lower Saxony's police forces with the German Federal Government and the police forces of the other federal states (Länder) in criminal matters. Aside from performing definite investigation responsibilities, it also supports other policies authorities by providing them with specialists, experts and specialized technologies (Polizei Niedersachsen, n.d. a).

The police academy is in charge of the selection of police officers, education and training of police officers and research matters (Polizei Niedersachsen, n.d. a).

The reorganization of the Dutch police, which came into effect on 1 January 2013, brought about some changes to the police management structure and the division of responsibilities in the Netherlands. As of that date, the former 25 regional police forces and the Dutch Police Services Agency (KLPD) merged into a single national police

force, which is part of the Ministry of Security and Justice and subordinated to a single national police commissioner (Government of the Netherlands, 2013). The new police force is composed of ten regional units (as indicated by Figures 6 and 7), a national unit (Landelijke Eenheid), as well as a police service center.

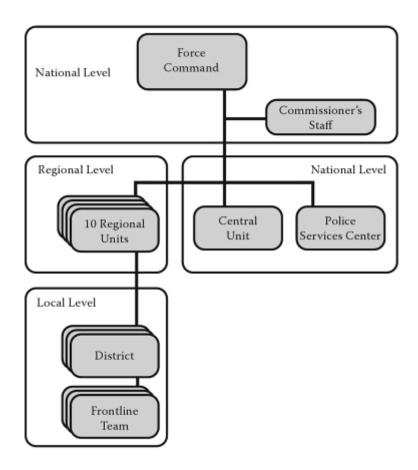


Figure 6- Organizational chart of the Dutch police (Hulshof, Heijmerikx et al., 2014, p. 107)

The service center assumes responsibility for handling all support services related to the operational management of the national police, such as information technology, purchasing, accommodation and human resources.

"The national unit (Landelijke Eenheid) consists of seven specialized forces that carry out particular police duties that can best be performed at national level" (Ministry of Security and Justice, 2011, p.2). Furthermore, the national unit provides expertise, equipment and extra manpower to the ten regional units to raise their efficiency during certain operations (Interpol, 2013).

The ten regional police units (Regionale Eenheden), which are each headed by its own police chief, are responsible for execution of the basic police tasks within their part of the country.



Figure 7- A single national Dutch police with ten regional units (Ministry of Security and Justice, 2011, p. 4)

Each regional unit is geographically divided into a number of police districts, which are again subdivided into several local basic units, the so-called frontline teams (Basisteams). Furthermore, each district commands a criminal investigation unit (Districtrecherche) and a so-called Flexteam, which provides support in the case of the basic unit facing a staff shortage (Interpol, 2013). Notwithstanding its reorganization, it should be noted that the authority over the police did not change. "The mayor and the chief public prosecutor still make local agreements about police deployment. Each

municipality draws up a public safety and security plan, which serves as a basis for the mayor's management of the police" (Government of the Netherlands, 2013, n.p.).

The surveillance of traffic offences is an important element of the basic police tasks within each of the ten regional police units and requires considerable resources owing to the increase in the volume of traffic. "It is estimated that basic police work in the Netherlands consists for one-third to two-thirds of controlling, settling or otherwise dealing with traffic events" (SWOV, 2008, p. 2). Besides the traffic enforcement undertakings of the regular police, the Traffic Enforcement Team of the National Public Prosecutor (Landelijk Parket Team Verkeer) also fulfills an integral function for the enforcement of traffic rules in the regional units. The Traffic enforcement Team exclusively concentrates on traffic controls and supports the regular police in their endeavor to increase road safety; "firstly by overseeing the enforcements plans of the regional police units, and secondly by providing extra manpower and means for special traffic projects" (SWOV, 2011, p. 1).

Since the ten regional units are each responsible for the police work in their part of the country (including traffic enforcement), it is advisable to examine the cross-border traffic police enforcement endeavors of only one Dutch regional police unit with the police of the German federal state of Lower Saxony. In order to apply the same method of selection as for the German police, the geographically biggest Dutch regional police unit that shares a common border with Germany was selected, namely Oost-Nederland (area tagged with number 2 in Figure 7).

8 Legal frameworks for cross-border police cooperation between Germany and the Netherlands

"European police cooperation is built on an incremental logic: Nobody seems to have a plan of what the arena of police cooperation should look like in the future and what the level of institutionalism in this field should be" (Walker, 2004, p. 11). "To a large extent, the rationale of integration relates to a shared perception of transnational threats. They are increasingly perceived and defined as a common issue, which can only be

controlled effectively when there is a concerted effort between the Member States, which may lack the power, capacity and resources to control these threats on an individual basis" (Den Boer, 2015, p. 115).

In 1985, Germany, the Netherlands, France, Belgium and Luxembourg signed the *Schengen Agreement*, which provided for the gradual abolition of border checks at the signatories' common borders (Council of the European Union, 2001).

The Schengen Implementation Convention, signed on 19 June 1990, set out how the gradual abolition of internal borders checks and the concomitant creation of a single external border of the signatory states would be applied. It stipulated that immigration checks for the Schengen Area are carried out with identical procedures and created common rules regarding visas, right of asylum and checks at external borders allowing the free movement of persons and facilitating the transport and movement of goods within the signatory states without disrupting law and order (European Commission, 2010b).

"In order to reconcile freedom and security, this freedom of movement was accompanied by so-called "compensatory" measures. This involved improving cooperation and coordination between the police and the judicial authorities in order to safeguard internal security and, in particular, to fight organized crime" (EUR-Lex, 2009, n.p.). To this end, for instance a joint database, the Schengen Information System (SIS) was set up that enables authorities of the Schengen Member Countries to exchange data of missing and wanted persons as well as lost and stolen property (Federal Ministry of the Interior, 2015). Furthermore, the *Schengen Implementation Convention* also contained provisions that allow law enforcement officers of the participating countries to engage in cross-border surveillance (Art. 40) and cross-border hot pursuit (Art. 41) under certain stipulated conditions (Council of the European Union, 2001).

"European cross-border police cooperation has been particularly widened and deepened as a result of the *Prüm Convention*, which was signed in 2005" (Den Boer, 2012, p. 205) by Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Spain. By means of this convention, the contracting parties intended to improve the exchange

of information and to step up cross-border cooperation, "particularly in combating terrorism, cross-border crime and illegal migration (Council of the European Union, 2005, p. 3). For the prevention and investigation of these and other illegal activities, as well as for maintaining public order and security, the convention inter alia provided for the automated sharing of DNA (Art. 2-7), fingerprint data (Art. 8-9) and the automated searching of vehicle registration data (VRD) (Art. 12). Moreover, the *Prüm Convention* also allows for various forms of operational police cooperation, such as "joint patrols and other joint operations in which designated officers or other officials from other contracting parties participate in operations within a contracting party's territory" (Council of the European Union, 2005, Art. 24(1)). To this effect, "each contracting party may, as a host state, in compliance with its own national law, with the seconding state's consent, confer sovereign powers on other contracting parties' officers involved in joint operations or, in so far as the host state's law permits, allow other contracting parties officers to exercise their sovereign powers in accordance with the seconding state's law"(Council of the European Union, 2005, Art. 24(2)).

In urgent situations, the convention even concedes the right that "officers from one contracting party may, without another contracting party's prior consent, cross the border between the two so that, within an area of the other contracting party's territory close to the border, in compliance with the host state's national law, they can take any provisional measure necessary to avert imminent danger to the physical integrity of individuals" (Council of the European Union, 2005, Art. 26).

In addition to these multilateral conventions, Germany and the Netherlands also signed a bilateral treaty on the deepening of police cooperation in 2005, formally entitled the *Treaty between the Kingdom of the Netherlands and the Federal Republic of Germany concerning cross-border cooperation by police and in criminal law matters*⁶ (that is often also referred to as the *'Treaty of Enschede'*). The aim of this treaty, which entered into force on 1 September 2006, is to "make cooperation against international crime and

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The text of the treaty (in Dutch and German) is available at http://dipbt.bundestag.de/extrakt/ba/WP16/3/395.html See *BT-Drs* 16/57 (*Gesetzentwurf*), retrieved on 18 December 2014

cross-border threats more effective, to expand the possibilities for criminal justice cooperation, and to intensify cross-border exchange of information in order to prevent and investigate criminal offences" (Deutscher Bundestag, 2005, p. 7).

For this purpose, the 'Treaty of Enschede' provided for "the intensification of the communication between the relevant police forces with a focus on the exchange of strategic (non-operational) data on crime, communication on patterns that relate to the behavior of suspects and typical suspect behavior, direct communication between the authorities about upcoming events, activities and special incidents relevant to the police, a mutual register with contact data and mandates, mutual information about the purchase of technical equipment in order to improve interoperability and harmonized use of radio contact and radio frequencies (Deutscher Bundestag, 2005, Art. 4 (1) (a)-(g)).

Like the *Prüm Convention*, the 'Treaty of Enschede' also allows police officers from one contracting party to operate on the other contracting party's territory (in compliance with the host's state national law) on request (Art. 7) or, in circumstances requiring immediate action, without prior consent (Art. 6).

In addition, the 'Treaty of Enschede' provides for an intensification of the cross border cooperation between the police forces of Germany and the Netherlands "by means of a mutually coordinated plan for the deployment of police officers from both forces in the cross-border regions, the establishment of joint centers and command centers, as well as joint operational teams (Grenzüberschreitendes Polizeiteam (GPT)), joint programs for the prevention and investigation of criminal offences, evaluation and improvement of working practices, probationary periods for police officers and the stationing of representatives within special police operations" ((Deutscher Bundestag, 2005, Art. 4 (2) (a)-(h)).

9 SQ 2: To what extent do the police forces of Lower Saxony (GER) and Oost-Nederland (NL) engage in joint control operations that comply with the EU's policy plans to fight speeding, drink-driving and non-use of seatbelts?

It should be noted that the data used to answer this research question is principally primary data derived from the semi-structured face-to face interviews. In order to be able to differentiate between data derived from the interviews and data stemming from other sources, data derived from the interviews is written in italic and represented in grey (which also applies to the rest of this bachelor report).

According to Karl-Heinz Brüggemann, executive police director of the police administration Emsland/Grafschaft Bentheim (GER), "the mainspring to conduct joint control operations is that the police in Lower Saxony (GER) and Oost-Nederland (NL) have, independently from each other, analyzed the road safety situation in their jurisdictions", and that "during this analysis we discovered that we have comparable problems" (2014, p. 1). "A main cause of road traffic accidents is speed, especially for young and inexperienced road users. Alcohol and drugs are also common causes of accidents. Here, our main focus is also on young road users, aged between 18 and 24 years. Speed, alcohol and drugs are the main causes of road traffic accidents and young road users are the main group at risk. This is the case on this side of the border and also on the other side of the border. Therefore, one inevitably comes to some kind of a common way of thinking" (Brüggemann, 2014, p. 1).

His German colleague, Martin Piepmeyer, coordinator international relations of the police administration Osnabrück confirms this view by stating that "the joint control operations help to take actions against common problems on both sides of the border. Here, in particular the increasing number of so-called post-discotheque road traffic accidents give reason for concern. In order to deter young road users from operating a motor vehicle under the influence of alcohol or drugs (or both) during weekend nights, it is important to cover a fairly large area with joint controls" (2014, p. 1). "The abolishment of the internal European borders caused the disappearance of isolated areas of control in Europe. Before Schengen, certain criminal acts and also certain

road safety offences stopped at the internal borders, since the borders simply were not impenetrable" (Brüggemann, 2014, p. 8). After Schengen, "the border between the Netherlands and Germany is no real dividing line where the flow of traffic is interrupted. Young people from Lingen, Nordhorn or Osnabrück⁷ travel to Enschede⁸ to visit a discotheque there, or they even travel further to visit discotheques in Apeldoorn⁹. Vice versa, young people from Enschede or Apeldoorn like to visit the large-scale discotheque in Schüttdorf¹⁰. With our joint controls we intend to reach as many young people as possible in order to create the widely perceived impression that those operating a vehicle under the influence of either alcohol or drugs, or both, will be apprehended and punished. The same also applies to other traffic offences that represent a significant danger to the life and physical safety of the offending road user and others, like driving with excessive speeds or the omission to wear seatbelts" (Piepmeyer, 2014, p. 1).

Hans Bijkerk, superintendent of the infrastructure division of the police force of Oost-Nederland (NL) states that "since the year 2005 we work closely together with our German colleagues in the realm of road safety. Back then, I used to talk a lot with Karl-Heinz Brüggemann about post-discotheque accidents with several injured and killed young people in the cross-border region. For example, in the autumn of 2004, five young Dutch males were killed in a tragic road traffic accident near the Dutch city of Almelo¹¹. After having visited the German discotheque 'Index' in the German town of Schüttdorf they were on their way back home to the Netherlands. Presumably due to speeding, the car strayed from the road and crashed into a group of trees whereupon it caught fire¹². All five vehicle occupants died. In this way, there was a number of road traffic accidents in the cross-border region that gave reasons for concern.

⁷ Lingen, Norhorn and Osnabrück are cities located in the west of Lower Saxony (GER)

⁸ City located in the east of the Netherlands

⁹ City located in the centre of the Netherlands

Town located in southwesternmost of Lower Saxony (GER)

Dutch city in the eastern Netherlands

http://www.refdag.nl/nieuws/binnenland/vijf_doden_door_ongeval_bij_almelo_1_88512, retrieved 23 September 2014

Consequently, the Dutch and the German police came to the conclusion that something needs to be done about this situation" (2014, p. 1).

Despite being confronted with similar problems, to some extent, it should however be noted that "there is no concerted cross-border road safety concept between the police forces of Lower Saxony and Oost-Nederland" (Brüggemann, 2014, p. 1). This circumstance is explained by Hans Bijkerk as follows: "For the police, statistics underpin and influence how the police direct their traffic enforcement processes. Statistics enable the police to understand problems, predict future risks and set the right priorities for the future accordingly. There are however no common statistical reports about road traffic accidents for Lower Saxony and Oost-Nederland. The Dutch Central Agency for Statistics (Het Centraal Bureau voor de Statistiek) ascertains the number of fatal traffic accidents and the number of seriously injured road users as well as the most frequent causes of accidents for Oost-Nederland, and a similar German institution will do the same for Lower Saxony. However, there are no common datasets for the two jurisdictions that could lead to the formulation of some kind of cross-border road safety concept. Therefore, each police force primarily directs its own traffic enforcement processes according to its own local problem analysis. The joint control operations between the two forces constitute some kind of additional benefit to the respective efforts of each of the two forces to improve the road safety situation in their jurisdiction. Since driving under the influence and speeding are two longstanding road safety problems in both jurisdictions, one inevitably comes to the conclusion that it makes sense to tackle these problems together, even if it is only occasionally" (2014, pp. 9-10). Furthermore, Karl-Heinz Brüggemann adds for consideration that "some police regions in the Netherlands do not essentially have the same road safety problems as we do have in Lower Saxony: In the Emsland region we do have a well-developed roadway network that allows road users to drive relatively fast. Here, collisions with trees are a major problem. Other geographical regions do not have comparable problems. The police would then of course also not come to the idea to shift their enforcement focus into this direction. Even within Lower Saxony different regions have different problems and the police develop specific enforcement programs according to their local problems. If police enforcement programs do not necessarily have the same focus within Lower Saxony, how could they have the same focus across national borders? All in all, there is only some overlap in one or another case and therefore our cooperation endeavors are also only of an intermittent, ad hoc nature. There are only some situations that trigger joint traffic control operations, like for instance a discotheque in the border region or a common accident prone route like for instance federal highway (Bundesstraße) B 402 that connects Lower Saxony and Oost-Nederland" (2014, p. 4).

While driving under the influence (of alcohol and drugs) and speeding are apparently two road safety problems that still occasionally trigger joint traffic control operations in both jurisdictions and the cross-border region, this does not seem to be the case for the non-use of seatbelts. As Hans Bijkerk puts it, "it is indeed the case that the EU puts a high emphasis on fighting speed, alcohol and the omission to wear seatbelts in order to reduce the number of casualties on roads throughout Europe" (2014, p. 8). "Such an agenda-setting is based on a pan-European problem analysis" (Brüggemann, 2014, p. 1). As, however, seatbelt rates "are relatively high in both jurisdictions, at least as far as front seats are concerned 13, additional safety gains through increased enforcement are hard to achieve" (Bijkerk, 2014, p. 4). This is why "the enforcement of seatbelt legislation only plays a minor role in the cross-border police cooperation endeavors of the two forces", and "there are no concerted police operations that specifically target unbelted vehicle occupants" (Bijkerk, 2014, p. 3). Therefore, "seatbelt violations are most of the time only detected if vehicles are stopped in stationary checkpoints that were actually established for control operations with a different focus; as some kind of bycatch in a way" (Bijkerk, 2014, p. 14).

Although, according to Hans Bijkerk "driving under the influence and inappropriate speed are still regarded as major risk factors on our roads and therefore remain high on our agenda" (2014, p. 4), "there are barely any large-scale cross-border control operations left that exclusively focus on the enforcement of speed and alcohol (and

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Karl-Heinz Brüggemann estimates that "in Germany, we have a seatbelt rate of 90%" (2014, p. 6).

perhaps seatbelt) legislation" (2014, p. 9). Exceptions are intermittent cross-border joint control operations targeting road user that operate vehicles under the influence of alcohol and drugs and the so-called 'Blitzmarathon' (Brüggemann 2014; Bijkerk, 2014). "Regarding alcohol and drugs, we for instance intermittently conduct joint control operations in the community of Uelsen", says Karl-Hein Brüggemann (2014, p. 2). "In Uelsen, there is a discotheque called 'ZAK'. 90% of the guests of 'ZAK' are Dutch. During weekend nights, we conduct joint controls in the close proximity of the discotheque. When we for instance plan to conduct an alcohol control operation, then we inform our colleagues in Oost-Nederland about our endeavors and we control the departing traffic together. The German police officers control the departing traffic going west" (Brüggemann, 2014, p. 2).

9.1 'Blitzmarathon'

The so-called 'Blitzmarathon' is a highly intensified speed enforcement operation lasting for 24 hours. During this time, the police and municipalities deploy a vast number of speed detection teams at many locations in order to check for speeding offences. "Characteristic of the 'Blitzmarathon' is the combination of intensive communication about the fatal consequences of speeding and the publication of control locations on the internet and in local and regional media" (TISPOL, 2013b, n.p.).

While the initial 'Blitzmarathon', conducted on 10 February 2012, only took place in the German federal state of North-Rhine Westphalia, the second 'Blitzmarathon', conducted on 24 October 2012, took place in parallel across the German federal states of North-Rhine Westphalia, Lower Saxony and the Netherlands (TISPOL, 2012). Since then, the 'Blitzmarathon' takes place every six months on a nationwide basis in Germany.

When asked about the participation of the police force of Oost-Nederland in further 'Blitzmarathons', Hans Bijkerk answered the following: "It is possible that the National Police Agency (Landelijke Eenheid) contemplates to not participate in the 'Blitzmarathon' any longer. However, the police unit of Oost-Nederland still

participates in the cross-border 'Blitzmarathon'. I am responsible for the strategic orientation of the road safety activities of the police in the Twente region, which is part of the police unit of Oost-Nederland, and I can assure you that we are still involved in the implementation of the cross-border 'Blitzmarathon'. This means that if our German colleagues schedule the 'Blitzmarathon' in their jurisdictions, we also conduct intensified speed controls on our roads" (2014, pp. 4-5).

Results 'Blitzmarathon'

In cooperation with the Dutch police, police forces of the German federal states of Lower Saxony and North Rhine-Westphalia conducted a highly intensified speed control operation on both sides of the Dutch/German border from 24 October 2012 06:00 a.m. to 25 October 2012 06:00 a.m.. On the Dutch side of the border, the police checked the driving speeds of about 25,000 vehicles. Of these, approximately 3,000 were caught exceeding the speed limit.

Most speed offenders were caught on the Dutch motorway A1. Here, one out of five drivers drove faster than it was legally allowed. On the Dutch motorways A12, A67 and A76 the number of speeding offenders was substantially lower. According to the Dutch police, this was most likely due to intense media attention paid to the 'Blitzmarathon' in these regions.

On the German side of the border, the police checked the driving speeds of about 700,000 vehicles. More than 24,000 drivers were caught for having exceeded the speed limit.

(Source: http://nos.nl/artikel/435425-27000-geflitst-bij-blitzmarathon.html, retrieved 26 May 2015).

Participating in the cross-border 'Blitzmarathons', "first of all means that speed controls are conducted by all the forces at the same time. Furthermore, it also means that these speed controls are closely coordinated. If our German colleagues in North Rhine-Westphalia for instance perform speed controls on the Federal Highway (Bundesstraße) B54, which becomes the Dutch National Highway (Rijksweg) N35 after the Dutch/German border, then the Dutch police also performs speed controls on the N35. The speed controls are coordinated insofar that if our German colleagues perform speed controls just short of the Dutch/German border, then the Dutch police does not perform speed controls right across the border. The joint speed controls are hence managed in such a way that road users are provided with the opportunity to reflect on their inappropriate speed and to adapt their speed to the prevailing speed limit. By

means of an intermission between the checkpoints, we basically grant the road user some kind of a moment of decision. When a certain road user exceeded the speed limit on the German side of the border and was detected by the German police, then the road user in question can make use of this moment of decision and adapt the speed to the prevailing speed limit. If the road user lets this opportunity pass without adapting the speed when crossing the border, then there is a good chance that the same obstinate road user will be caught speeding by the Dutch police as well. This would have the result that the road user in question will have to pay two speeding fines; one in Germany and one in the Netherlands" (Bijkerk, 2014, p. 6).

Hans Bijkerk furthermore annotates that "while it is important to create a dense network of checkpoints in order to give as many road users as possible the impression that there is a good chance that they will be caught if they exceed the speed limit, it is also important to avoid that road users suspect the Dutch and German police forces for ripping them off mercilessly during cross-border speed controls like the 'Blitzmarathon'. In order to get the balance right, we closely coordinate our joint speed controls during the cross-border 'Blitzmarathon'" (2014, p. 6).

According to Martin Piepmeyer, "the recent trend for the Dutch/German cross-border control operations is to move away from controls that either focus on only apprehending offending road users or only apprehending criminals that use the road network for their illegal activities. Instead the emphasis is more on controls with a holistic approach; where we do both" (2014, p. 2). His German colleague, Martin Stallkamp confirms this view by stating that "the joint controls conducted by the police forces of Lower Saxony and Oost-Nederland can barely be seen in one-dimensional terms as being either purely directed at road safety or fighting crime; both aspects play a vital role" (2014, p. 1). While it became evident during the conversations with all interviewees that there used to be more cross-border police operations with a clear focus on road safety in the past, "there has been a change of approach in recent years" and "the type of controls that are conducted by the two forces simply changed" (Bijkerk, 2014, p. 9). By stating that "the current controls mainly pursue a holistic approach and

combine road safety aspects with fighting crime" (2014, p. 9), Hans Bijkerk confirms the statements of his German colleagues.

Regarding joint control operations with a holistic approach, all interviewees mention two types of controls. These are the so-called 'East-West Search' (Ost-West-Fahndung) and the 'Corridor Search' (Korridorfahndung). The characteristic feature of both operations is that "in addition to large numbers of police officers they are also staffed with personnel from other authorities that perform safety-related tasks like customs authorities, employment agencies and environmental authorities" (Piepmeyer, 2014, p. 2). According to Martin Piepmeyer, "the police in Lower Saxony for instance is the only German police administration that signed a contract with the Dutch ILT authority (Inspectie Leefomgeving en Transport); they regularly participate in controls with a holistic approach on the main traffic arteries in the Dutch/German border area" (2014, p. 2).

9.2 'East-West Search' (Ost-West-Fahndung)

During the 'East-West Search', which is conducted four times a year, police officers from Germany, the Netherlands and Poland are simultaneously checking vehicles on the European route E30 from Amsterdam to Warsaw (Bijkerk, 2014; Brüggemann 2014). The participating police officers target "tobacco smuggling, human trafficking, smuggling of drugs and weapons, as well as trafficking of stolen cars and burglaries. Basically the focus here is on everything that can be moved across borders. However, even if the prime focus is on fighting cross-border crime, road safety aspects also always play a role during this type of joint control operations as for instance driving under the influence or speeding. A good thing about these search operations is that they are not conclusively defined; they are flexible in nature. This basically indicates that there is admittedly some kind of framework or heading, but the police in Lower Saxony and Oost-Nederland have the opportunity to add additional topics. Despite some predetermined processes, both forces can actually additionally do what they consider to be right in order to reach a satisfactory situation. Our Dutch colleagues for instance

make use of number plate identification systems and additionally we check for speeding violations" (Stallkamp, 2014, p. 2).

9.3 'Corridor Search' (Korridorfahndung)

During the 'Corridor Search', which is conducted twice a year, police officers from the Netherlands and Germany are checking vehicles along the Dutch/German border, from Groningen to Aachen (Bijkerk, 2014; Brüggemann, 2014).

As the 'East-West Search', the 'Corridor Search' also follows a holistic approach. Holistic in the sense that aspects of road safety and fighting crime play a role. "The criminal activities that are mainly targeted encompass the following: Human trafficking, smuggling of drugs and weapons, as well as trafficking of stolen cars, cargo theft and trafficking of stolen goods; basically everything that presents a problem in both countries" (Brüggemann, 2014, p. 2).

Additionally, police officers also check for violations of traffic laws and regulations, such as speeding or driving under the influence of alcohol or drugs (Piepmeyer 2014; Bijkerk, 2014; Stallkamp, 2014).

According to Karl-Heinz Brüggemann, "of course, the motorway is first of all a major traffic artery, but it is also a crime scene, one should not forget that. With control operations that follow a holistic approach, there is a clear added value to our police work and we therefore come to an agreement to perform these types of operations relatively quickly with our Dutch colleagues" (2014, p. 5).

Results 'Corridor Search' (Korridorfahndung)

On Tuesday 19 May 2015, the police in cooperation with other law enforcement authorities conducted a 'Corridor Search' (Korridorfahndung) along the Dutch/German border, from Groningen to Aachen. The control was directed against traffic offences and cross-border crime.

In total, about 4,500 vehicles and more than 6,650 persons were checked. 1,475 persons were subjected to breath alcohol tests and various commodities and drugs were confiscated.

The control operation was staffed with about 800 personnel from the Royal Netherlands Marechaussee (Koninklijke Marechaussee), customs (Douane and Deutsche Zollbehörde), Dutch police officers from the regional units of Noord-Nederland and Oost-Nederland and the national police unit (Landelijke Eenheid) as well as German police officers from the federal states of Lower Saxony, North Rhine-Westphalia, Saxony and Saxony-Anhalt. Also, the Polish police carried out checks at the same time.

From 04:00 p.m. up to midnight the abovementioned law enforcement authorities performed checks at several border-crossing points along the Dutch/German border and at several locations remote from the border.

Vehicles and persons were checked for stolen goods, burglar's tools, drugs, cargo and the possession of necessary (transport-and identity) documents. Drivers and vehicle occupants were additionally enquired about travel routes and travel destinations. New information and insights were gathered that can potentially be used for future control strategies.

During the control operation the police detected and confiscated 1,280 grams of marihuana, 52 grams of heroin, 400 grams of cocaine, 23 marihuana plants, ten joints, nine hash cookies and 26 grams of magic mushrooms. Furthermore, the police detected and confiscated one switchblade and one can of pepper spray. Seventeen drivers were charged with driving without license and fines totaling EUR 20,000 were imposed for traffic offences.

Due to technical defects the police immobilized a Hungarian and a Romanian motortruck. Due to missing transportation permissions, three other motortrucks had to discontinue their journey and were sent back to the Netherlands.

EUR 27,980 in cash were found in the spare tire of a Belgian cab. The money was temporarily confiscated.

(Source:https://www.politie.nl/nieuws/2015/mei/20/oost-nederland---grote-internationale-veiligheidscontrole-grensstreek-nederland.html, retrieved 27 May 2015)

9.4 'Dawn-Operation' (Operatie Ochtendgloren)

As the only respondent Hans Bijkerk states that "there is a further cross-border police operation that deserves to be mentioned: The so-called 'Dawn-Operation' (Operatie Ochtendgloren). The former Korps Landelijke Politiediensten (KLPD) and the regional police forces are responsible for the organization of this type of operation that is conducted twelve times a year" (2014, p. 3). According to the superintendent of the

infrastructure division of the police force of Oost-Nederland "this operation is not only conducted in the Dutch/German border region, but for instance also in the Dutch province of Gelderland. Based on the gut instincts of the involved police officers, vehicles are pulled over and checked from approximately 11:00 p.m. to 2:00 a.m.. As of 2:00 a.m., when roads are less busy, the police establishes stationary checkpoints where all the passing vehicles are pulled over and checked. The vehicles and the vehicle occupants are then not only checked by Dutch police officers, but also from Dutch customs authorities or German police officers. Martin Stallkamp from the police directorate Osnabrück is for instance quite frequently involved in 'Ochtengloren'-Operations. All in all, the 'Ochtendgloren'-Operation is quite diversified and can have different foci: Vehicles and their occupants are for instance checked for illegal weapons, stolen property and drugs. Besides targeting these aspects of cross-border crime, the 'Ochtendgloren'-Operations also target offending road users and can include alcohol checks and speed controls" (2014, p. 3).

9.5 Cross-border police team (Grenzüberschreitendes Polizeiteam (GPT))

Besides the aforementioned holistic joint control operations, all interviewees also mention the work of the cross-border police team (Grenzüberschreitendes Polizeiteam (GPT)) regarding the cross-border police cooperation endeavors of the two forces under examination.

The cross-border police team, which is located in Bad Bentheim in Lower Saxony, Germany, is a standing police unit constituted of police officers from Lower Saxony, North Rhine Westphalia, the German Federal Police, Oost-Nederland and the Marechaussee (Bijkerk, 2014; Stallkamp 2014). "Together, they perform all day-to-day policing responsibilities, including road safety issues. In the realm of road safety, the focus of the GPT is on apprehending road users that drive under the influence of alcohol and/or drugs and on road users that exceed the maximum permitted speed" (Bijkerk, 2014, p. 3). ¹⁴

More information regarding the cross-border police team is available in Dutch and German under http://de.g-p-t.eu

Results 'Dawn-Operation' (Operatie Ochtendgloren)

In the night from Thursday 18 December to Friday 19 December 2014 several law enforcement authorities jointly participated in the 'Dawn-Operation' on the national highway A1 near the Dutch municipality of Rijssen-Holten (in the province of Overijssel). In the time between 10:30 p.m. and 03:30 a.m. the law enforcement authorities in total checked 420 vehicles.

The 'Dawn-Operation', which forms part of a series of international traffic and crime control operations along the European route E30 between Amsterdam and Warsaw, was this time dedicated to the 'Dark Days-Offensive' (Donkere Dagen Offensief (DDO))¹⁵ of the Dutch police.

The joint control operations was staffed with about 100 personnel from the infrastructure division of the police force of Oost-Nederland, the Royal Netherlands Marechaussee (Koninklijke Marechaussee), customs (Douane), Police Department of Münster (GER), Police Directorate of Osnabrück, the revenue authority (Belastingsdienst) Oost NL, the Dutch Network Drugs Expertise (Drugsexpertise Nederland), the vehicle crime unit of the Dutch police (Permanent Auto Team (PAT)) and the national criminal investigation service (Dienst Landelijke Recherche (DLR) of the Dutch national police unit (Landelijke Eenheid).

The law enforcement authorities detected and confiscated 55kg of illegal fireworks in two cars registered outside the Netherlands. A report was filed against the owners.

Several small quantities of drugs for private consumption were detected, which the owners handed over voluntarily. The drugs were destroyed.

The law enforcement authorities detected and confiscated two cans of pepper spray and a baton. A report was filed against the owners.

The ANPR (Automatic Number Plate Recognition) gave several hits on vehicle owners flagged with enforceable tax debts. Of these, the revenue authority directly collected about 4,000 €. Furthermore, four cars were confiscated immediately and another nine cars were put under sequestration. The ANPR gave additional hits on vehicle owners who have failed to pay previously imposed fines. Of these, 4,200 € were directly collected. Furthermore, one car was immobilized and one person, who was unable to pay the previously imposed fine, was arrested.

In total, twelve reports were filed for traffic offences, such as driving without license, non-use of seatbelts, driving without insurance and driving under the influence.

In total, the driving speeds of 3,518 vehicles were checked. 280 road users were found to have exceeded the speed limit.

(Source: https://www.politie.nl/nieuws/2014/december/19/rijssen--holten-controle-%E2%80%9Cochtendgloren%E2%80%9D.html, retrieved May 25, 2015)

¹⁵ "In the winter months, criminals frequently engage in criminal activities, that often reach their peak before the Christmas holidays. The winter darkness offers more opportunities for criminals to strike and flee unseen. During this time the police therefore take additional measures against muggings, street robberies and domestic burglaries, such as the increased surveillance of crime hotspots and (potential) criminals. Furthermore, the police also conduct additional control operations on the main arterial and radial roads." (Politie, 2014, n.p.)

Based on the findings of this section of the bachelor thesis it can be concluded that the EU's fight against the 'three main killers' on EU roads, basically turns into a fight against only two 'killers' (speeding and drink-driving) during the joint control operations of the police of Lower Saxony and Oost-Nederland. Based on the fact that seatbelt rates are already relatively high in both jurisdictions, extra safety gains through police enforcement are hard to achieve and therefore, if it all, the enforcement of seatbelt legislation only play a subordinate role when the two forces engage in joint operations It can furthermore be concluded that the 'Blitzmarathon' is the only joint control operation that exclusively serves a road safety purpose. Therefore the 'Blitzmarathon' seems to be the only type of control operation conducted by the two forces that fully complies with the EU's call for an intensification and generalization of the principle of targeted road safety enforcement campaigns in and between the Member States (European Commission, 2010a). All the other joint control operations, namely the 'Corridor Search', the 'East-West Search', the Dawn-Operation (and also the work of the GPT) are coined by what the interviewed key informants label as the holistic approach. Control operations with a holistic approach actually combine road safety aspects with fighting cross-border crime. While all key informants state that road safety aspects play a role during control operations that follow a holistic approach, their prime focus, however, seems to be on fighting cross-border crime.

Although all key informants state that road safety aspects play a role during control operations that a follow a holistic approach, the impression emerges that the prime focus is on fighting cross-border crime, while road safety aspects only play second fiddle.

10 SQ 3: Which enforcement measures are known to be best practice in the fight against speeding, drink-driving and the non-use of seatbelts?

After having presented to what extent the two police forces under examination engage in joint control operations in which the enforcement of speed, alcohol and (to a lesser extent) seatbelt legislation plays a role, the following section of this report is devoted to shed light on enforcement practices that are known to be best practice for the

enforcement of speed, alcohol and seatbelt legislation. It should be noted that a commonly agreed definition of what constitutes best practice to tackle speeding, drink-driving and the non-use of seatbelts is not available. However, best practice in this regard obviously refers to a specific police enforcement measure that has proven to be successful- successful in terms of bringing about a sustainable reduction in the number of road traffic accidents, accident victims and, in particular, in the number of fatalities.

In order to be able to answer the abovementioned sub-question, information was derived from the following three main data sources: The *SUPREME Thematic Report: Enforcement* (SUPREME, 2007), the *Recommendation 2004/345/EC on enforcement in the field of road* safety (European Commission, 2004) and the *Handbook of Road Safety Measures* (Elvik, Høye et al., 2009).

As stated earlier in this report, in its *Recommendation* 2004/345/*EC*, the European Commission provided concrete best practice measures for the enforcement of traffic laws and regulations in the priority areas of speeding, drink-driving and non-use of seatbelts. To recall, against speeding the Commission suggested the widespread and regular use of automated speed enforcement equipment on motorways, secondary roads and urban roads (European Commission, 2004).

With respect to drink-driving the Commission suggested the application of random breath testing (RBT) with alcohol screening devices and the use of evidential breath test devices (2004). Regarding the enforcement of seatbelt legislation it was recommended to conduct intensive enforcement actions of a certain duration which take place several times a year (European Commission, 2004). Since the *Recommendation* 2004/345/EC was formulated more than ten years ago and the recommended best practice enforcement measures therefore might be outdated, enforcement measures that are designated as best practice for the enforcement of speed, alcohol and seatbelt legislation by two more recent publications are also taken in consideration for answering the third sub-question of the bachelor thesis.

10.1 Best practice for speed enforcement

Basically, there are two main methods of speed enforcement available for the police. The first involves police officers who are checking drivers at the road side and who are apprehending and controlling offenders. In the literature this method is often called stationary enforcement or physical policing (DaCoTA, 2012). The equipment that can be used for stationary enforcement comprises vehicle borne equipment such as video- or photo cameras as well as laser and radar devices that are either hand- held or mounted on a tripod (Ricour, n.d.).

The second method involves speed cameras that detect speeding violations and identify the vehicle/driver (semi-) automatically (DaCoTA, 2012). "Identification is based on photographs of the vehicle and driver, usually from the front, but sometimes from the rear" (Elvik, Høye et al., 2009, p. 890). Thanks to the photos taken by the camera, there is no need for a police officer to stop the vehicle after a speeding offence was detected. Once the driver or the owner ¹⁶ of the vehicle is identified, a fine or a notification will be sent by mail afterwards. "Speed cameras can be used full-time at fixed locations (fixed cameras) or can be moved between different locations (mobile cameras). Speed cameras can operate automatically (unmanned) or as part of a manned control (either visibly or hidden in a car or van)" (DaCoTA, 2012, p. 12).

10.1.1 Stationary enforcement/physical policing

Literature on speed enforcement by the police traditionally distinguishes between two different types of stationary enforcement/physical policing (Zaidel, 2002). "One is with an unobtrusive/hidden observation site, which measures driving speeds, and a clearly visible apprehension site some distance downstream" (Elvik, Høye et al., 2009, p. 886). At the observation site, police officers make use of a radar or a laser device that measures the mean speed of passing vehicles between two fixed observation points. In

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While in the Netherlands the so called 'owner liability' is applied, where it is the registered owner of the vehicle who has to pay the fine, unless he or she identifies the actual driver, this is not the case in Germany. Here, the actual driver has to be identified.

case that a speed violation is detected by these police officers, a description of the speeding vehicle is relayed to the apprehension unit downstream, which then stops the vehicle and issues a citation to the driver (Zaidel, 2002).

"The other, predominantly found in the USA and hence labeled 'American type', is when the same police vehicle measures driving speeds from a roadside position, pursuits and apprehends the offender in case of speed violations (Elvik, Høye et al., 2009, p. 886).

When one of the abovementioned stationary enforcement methods is used in combination with another speed enforcement method, such as a patrolling or mobile police unit controlling for speed violations, this is commonly referred to as composite speed enforcement (Elvik, Høye et al., 2009; Zaidel, 2002).

Effects of stationary speed enforcement by the police on road traffic accidents were reviewed by Elvik, Høye et al. (2009). Based on a meta-analysis of the results from twelve studies¹⁷ on stationary speed enforcement, it was found that "stationary visible enforcement with radar/laser devices significantly reduces the number of road traffic accidents (-17%)" (Elvik, Høye et al., 2009, p. 887). It should be noted that "most results refer to injury accidents and that no significant difference between the effects on injury accidents and accidents with unspecified severity" was found (Elvik, Høye et al., 2009, p. 887).

As can be seen from Figure 8, Elvik, Høye et al. came to the conclusion that "stationary visible enforcement with radar/laser devices 'American type' did not reduce accidents" (2009, p. 887).

According to the meta-analysis conducted by Elvik, Høye et al. "composite speed enforcement shows a tendency of reducing the number of accidents, but it is not

(Norway); Pez (2002) (Germany)

The following studies were included in the meta-analysis: Novak & Shumate (1961) (USA); Ekström, Kritz & Strömgren (1966) (Sweden); Munden (1966) (UK); Mason (1970a, 1970b) (USA); Saunders (1977) (Australia); Brackett & Beecher (1980) (USA); Leggett (1988) (Australia); Salusjärvi & Mäkinen (1988) (Finland); McCartt & Rood (1989) (USA); Andersson (1991) (Sweden); Statens vegvesen Buskerud/UP (1996)

	Percentage change	Percentage change in the number of accidents				
Characteristics of enfo	orcement Accident severity	Best estimate	95% confidence interval			
Stationary visible en	nforcement with radar/laser					
All	Unspecified	<u>– 17</u>	(-31; -2)			
Stationary visible en	nforcement with radar/laser 'American type'					
All	Unspecified	-1	(-5; +4)			
Composite speed er	nforcement					
All	Unspecified					
	Without control for publication bias	s: –7	(-15; +1)			
	With control for publication bias:	-1	(-11; +9)			

Figure 8- Effects of stationary speed enforcement on accidents (Elvik, Høye et al., 2009, p. 887)

significant, and the results seem to be affected by publication bias. When publication bias is controlled for, the effect on accidents diminishes to almost zero" (2009, p. 888).

Based on the findings of the meta-analysis conducted by Elvik, Høye et al. (2009) it can thus be concluded that stationary enforcement that comprises an unobtrusive observation site with a clearly visible apprehension site can be labeled as best practice for the enforcement of speed by the police.

10.1.2 Automated speed enforcement with cameras

"Automated speed enforcement refers to various departures from the conventional procedure where a police officer stops a speeding vehicle and hands the driver a speeding citation" (Zaidel, 2002, p. 19). As stated earlier, speed cameras (that can either be fixed, or mobile and that can be operated automatically or as part of a manned control) identify when a vehicle is speeding and automatically take a photo of the vehicle's license plate and the driver. Subsequently, speeding citations are sent to the vehicle's registered owner or, alternatively, the identified driver of the vehicle (DaCoTA, 2012). While fixed speed cameras operate fully automatically 24 hours a day, seven days a week, mobile speed cameras are only partially automated, at one or more steps of the process. "A common semi-automatic mode of operation is one where the observation unit at the roadside, usually within a parked police car (clearly visible,

hidden, or unmarked) equipped with photo-radar or similar device, records speeding offenders but instead of stopping them the photo evidence is processed in the office and citations are sent to vehicle owners, or identified drivers" (Zaidel, 2002, pp. 19-20).

Elvik, Høye et al. (2009) also reviewed the effect of automated speed cameras on accidents. Based on a meta-analysis of the results from sixteen studies¹⁸, the researchers found that "fixed (visible) speed cameras reduce accidents of all severities by 24%. However, when publication bias is controlled for, the effect is reduced to -16%" (2009, p. 890).

Mobile (hidden) speed cameras were found "to reduce injury accidents by 10% and fatal accidents by 16%" (Elvik, Høye et al., 2009, p. 891). While Elvik, Høye et al. (2009) state that "neither result is statistically significant" (p. 891) and, based on the reviewed studies, it is therefore not clear that mobile (hidden) speed cameras are effective in reducing injury accidents and fatal accidents, it cannot be ruled out that mobile (hidden) cameras nevertheless have a positive effect on road safety. It is for instance conceivable that mobile (hidden) cameras reduce average speeds on roads where they are deployed. It is furthermore conceivable that road users that were caught by a mobile (hidden) speed camera, and therefore collected enough demerit-points to be close to having their driver's license revoked, slow down their driving speeds in the future.

As can be seen from Figure 9, section control was found to reduce the number of injury accidents by 30%. As "this result is, however, based on only one study, which does not include many accidents, this reduction is not statistically significant" (Elvik, Høye et al. 2009, p. 892).

The work of Elvik, Høye et al. (2009) shows that fixed (visible) speed cameras and section control have a greater effects on accidents than mobile (hidden) speed cameras.

London Accident Analysis Unit (1997) (UK); Newstead and Cameron (2003) (Australia); Nuyts (2006)

(Belgium); Oei & Polak (1992) (The Netherlands); Stefan (2006) (Ireland); Tay(2000) (NewZealand)

Bourne & Cooke (1993) (Australia)Cameron; Newstead, Diamantopoulou & Oxley (2003) (Australia); Elvik (1997) (Norway); Fuller (2006) (Ireland); Gains, Heydecker, Shrewsbury & Robertson (2004) (UK); Goldenbeld & van Schagen (2005) (The Netherlands); Hook, Kirkwood & Evans (1995) (UK); Jones,Sauerzapf & Haynes (2008) (UK); Kang (2002) (Korea); Lamm & Kloeckner (1988) (Germany)

As, however, fixed (visible) speed cameras and section controls are typically operated by non-police based organizations, such as provincial and municipal authorities, specialized governmental authorities (such as Rijkswaterstaat in the Netherlands) or

	Percentage change in the number of accidents				
Characteristics of enforcement	Accident severity	Best estimate	95% confidence interval		
Fixed (visible) speed cameras					
All	Unspecified				
	Without control for publication bias:	-24	(-29; -19)		
	With control for publication bias:	-16	(-23; -8)		
All	Fatal accidents	-39	(-60; -7)		
Less than doubled enforcement	Unspecified severity	-17	(-28; -5)		
More than doubled enforcement	Unspecified severity	-35	(-51; -15)		
New type of enforcement	Unspecified severity	-24	(-29; -19)		
Mobile (hidden) speed cameras					
All	Injury accidents	-10	(-22; +4)		
AII	Fatal accidents	-16	(-33; +5)		
Section control					
All	Injury accidents	-30	(-61; +25)		

Figure 9- Effects of speed cameras on accidents (Elvik, Høye et al., 2009, p. 891)

even private companies, fixed (visible) speed cameras or section controls do not qualify as a best practice measure for speed enforcement by the police. When it comes to automated (or semi-automated) speed cameras, the police only have mobile (visible or hidden) speed cameras at their disposal. Therefore, the deployment of mobile speed cameras (visible or hidden) is by necessity designated as a best practice measure for automated speed enforcement by the police throughout this report.

As a general conclusion, "speed enforcement is most effective when it is unpredictable and difficult to avoid, when there is a mix of highly visible and less visible activities, when there is a mix of physical policing and automated enforcement activities, and when it is continued over a long period of time" (SafetyNet, 2009, p. 3). Furthermore, it should also be noted that speed enforcement, in whichever form, is not a stand-alone measure. "To maximize its effect, it is best supported by other measures such as credible speed limits and publicity" (European Commission, 2015, n.p.). The OECD

(2006) for instance stated that "the effects of enforcement are substantially increased when supported by publicity and information" (p. 158). This view is also shared by road safety researchers such as Wegman & Goldenbeld (2006) and the European Commission, that suggested to combine enforcement with publicity campaigns in its *Recommendation* 2004/345/EC.

10.2 Best practice for drink-driving enforcement

"The most common countermeasure for deterring drink-driving involves the roadside testing of drivers using devices developed to measure the concentration of alcohol in a person's venous blood, most commonly through an examination of breath" (Bates, Soole & Watson., 2012, p. 97). During traffic controls conducted by the police, the breath alcohol concentration (BrAC) is used as a measure to estimate a person's blood alcohol concentration (BAC). Breath alcohol instruments (commonly referred to as breathalyzers) "translate the measured BrAC into the presumed alcohol concentration in a person's venous blood using a calibration factor. This is referred to as the blood/breath ratio (BBR) and the breath alcohol instrument gives results directly in terms of BAC derived as [BrAC x ratio= BAC]" (Karch, 2008, 37). 19

Depending on the jurisdiction, the testing of whether drivers are operating a vehicle with a BAC in excess of the maximum permissible legal limit²⁰ is either conducted in a compulsory manner, so-called random-breath testing (RBT), or in a selective manner, where only those drivers suspected to be under the influence of alcohol are subjected to an alcohol test (so-called selective breath testing (SBT)) (Elvik, Høye et al., 2009).

¹⁹ The value of the blood/breath ratio is 2000:1 in Germany and 2300:1 in the Netherlands (Karch, 2008, p. 37).

For the general public in Germany the driving of a vehicle in excess of a legal BAC of 0,5 g/L or a corresponding BrAC of 0,25 mg/L constitutes a criminal offence according to Article 24a of the German Road Traffic Act (Straßenverkehrsgesetz (StVG))/ For novice drivers there is a zero alcohol limit (Art. 24c, StvG)

For the general public in the Netherlands the driving of a vehicle in excess of a legal BAC of 0,5 mg/ml or a corresponding BrAC of 0,235 mg/L constitutes a criminal offence. For novice drivers there is a BAC limit of 0,2 mg/ml (SWOV, 2011)

The testing of whether drivers a operating a vehicle with a BAC in excess of the legal limit by the police can be conducted in a mobile (as part of routine traffic patrol) or stationary (roadside checkpoint) manner (SUPREME, 2007). "While neither approach is wholly deterrence or detection-oriented, the former is typically associated with higher detection rates and predominantly serves a specific deterrent function, while the latter, which is predominantly conducted in a highly overt fashion, typically serves more of a general deterrent function" (Bates, Soole & Watson., 2012, p. 97).

To recall, in its *Recommendation 2004/345/EC*, the European Commission designated the application of random breath testing (RBT) with an alcohol screening device as best practice for drink-driving enforcement. A more detailed specification whether RBT should be conducted in a mobile or stationary manner was however not provided.

The SUPREME Thematic Report: Enforcement (2007) also designated RBT as a best practice enforcement measure to tackle drink-driving. According to the report, in Sweden, "the proportion of the injury accident of cars, which involved drunken drivers, was reduced from 14% to 9% after the implementation of RBT (2007, p. 41). It should be noted that the implementation of RBT in Sweden "was accompanied by a low blood alcohol limit (BAC limit of 0,2 mg/ml), strong sanctions and voluntary rehabilitation courses for drivers with alcoholic problems" (SUPREME, 2007, pp. 40-41). Information on whether RBT by the police was conducted in a mobile or stationary manner (or both) was not given by the report.

According to Bates, Soole & Watson (2012), "there is a general consensus among road safety practitioners of the effectiveness of compulsory testing procedures (RBT), compared with selective approaches (SBT)" (p. 98). The European Commission endorses this viewpoint and states that admittedly "both systems are effective, but RBT is twice as effective as selective testing (only testing after suspicion)" (2015, n.p.). Thus, while there seems to be consistency about the fact that RBT qualifies as best practice to tackle drink-driving, a clear-cut recommendation on how the police should precisely conduct RBT cannot be derived. According to Bates, Soole & Watson (2012 "there exists a critical need to identify the optimal mix of mobile and stationary, overt

and covert approaches, which will invariably differ by context" (p. 99). As a one-size-fits-all solution for the effective application of RBT does not seem to exist, this report follows the European Commission's *Recommendation 2004/345/EC* and, in a very general manner, designates RBT as best practice for the enforcement of drink-driving laws by the police.

10.3 Best practice for enforcement of seatbelt use

Seatbelt enforcement can either be conducted by means of (highly visible) checkpoints by the police, or as part of mobile police controls. It is often conducted in combination with other types of enforcement (speed-or alcohol enforcement) and accompanied by information or media campaigns (Elvik, Høye et al., 2009).

To recall, in its *Recommendation 2004/345/EC*, the European Commission asked the Member States to ensure that intensive enforcement actions concerning the non-use of seatbelts with a duration of at least two weeks take place at least three times a year and that the use of seatbelts is enforced in every individual case where non-use is observed and the car is being stopped (2004). Whether intensified seatbelt enforcement should be conducted by means of (highly visible) checkpoints or as part of mobile police controls (or a combination of both) was however not mentioned in *Recommendation 2004/345/EC*. Just as for the enforcement of speed and alcohol laws and regulations, the European Commission also recommends to combine seatbelt enforcement with publicity campaigns (2004).

After having reviewed the implementation of a seatbelt enforcement program of the Swedish police, the SUPREME Thematic Report: Enforcement arrived at the conclusion that in order "to reach a high level of seatbelt use there has to be a mandatory law with effective sanctions and an intensive highly visible and well-publicized enforcement" (2007, p. 64). With full implementation of the measures "the fatalities among car occupants are expected to decline by 20%, while the number of severe injuries is expected to decline somewhat less relatively seen" (SUPREME, 2007, p. 64). Although not specifically stated in the SUPREME Thematic Report: Enforcement, it can be assumed that the Swedish police enforces seatbelt legislation by means of checkpoints,

as the seatbelt enforcement of the police is described as being "highly visible" (2007, p. 64).

In their *Handbook of Road Safety Measures* (2009), Elvik, Høye et al. also reviewed the effects of seatbelt enforcement by the police on seatbelt use. Based on a meta-analysis of the results from fifteen studies²¹ on seatbelt enforcement by the police, it was found that seatbelt use "increased by 21% during the enforcement period, and by 15% afterwards" (2009, p. 895). Whether seatbelt enforcement was conducted by means of checkpoints or as part of mobile police controls (or a combination of both) was not clearly mentioned by the authors. A differentiation between the effects of seatbelt enforcement by means of checkpoints and the effects of seatbelt enforcement as part of mobile controls was consequently not made.

	Before-during		Before-after	
	Best estimate	95% confidence interval	Best estimate	95% confidence interval
All results	+21	(+16; +27)	+15	(+10; +20)
Studies without comparison	+38	(+10; +73)	+11	(+1; +23)
Studies with comparison	+20	(+14; +26)	+17	(+11; +22)
Nighttime	+40	(+31; +50)	+12	(0; +26)
Day-time	+11	(+3; +19)	+10	(+4; +17)
Increase of enforcement	+30	(+18; +44)	+19	(+11; +28)
Changed form of enforcement	+18	(+12; +25)	+12	(+7; +16)
Publicity campaign	+24	(+17; +31)	+20	(+13; +28)
Local publicity	+21	(+12; +31)	+17	(+7; +28)
Comprehensive program	+17	(+10; +25)	+9	(+6; +12)
No publicity			-13	(-19; -8)
Announced checkpoints	+21	(+14; +27)	+19	(+13; +25)
Checkpoints not announced	+11	(+2; +21)	+9	(+1; +17)

Figure 10- Effects of seatbelt enforcement on seatbelt use (Elvik, Høye et al., 2009, p. 895)

Gundy (1988) (Netherlands); Gras & Noordzij (1987) (Netherlands); Lund, Stuster & Fleming (1989) (Netherlands); Vissers (1989) (Netherlands); Dosselaar, van Winterink & Benjamins (1988) (Netherlands); Beke & Wilbers (1990) (Netherlands); Reinfurt, Campbell, Stewart & Stutts (1990) (USA); Hagenzieker (1991) (Australia); Mathijssen (1992) (Netherlands); Streff, Molnar & Christoff (1992) (USA); Wells, Preusser & Williams (1992) (USA); Kaye, Sapolsky & Montgomery (1995) (USA); Salzberg & Moffat (2004) (USA); Geary, Ledingham & Maloney (2005) (USA); Nuyts & Vesentini (2006) (Belgium)

As can be seen from Figure 10, the effects of seatbelt enforcement by the police on seatbelt use are larger at night than during daytime. The results of the meta-analysis furthermore indicate that "effects are greater when the intensity of enforcement increases than when a new form of enforcement is introduced" (Elvik, Høye et al., 2009, p. 896). When seatbelt enforcement is coupled with publicity campaigns, seatbelt use is increased by 24% during the enforcement period, and by 20% afterwards.

Additionally, it can be derived from the work of Elvik, Høye et al. that the effect of seatbelt enforcement is greater when checkpoints are announced than when checkpoints are not announced.

Based on the insights of the reviewed literature, it can be inferred that in order to increase seatbelt wearing rates, seatbelt enforcement by the police should be intensified. Whether intensified seatbelt enforcement by the police should be conducted in a highly visible manner (checkpoints) or as part of (unobtrusive) mobile police controls is not clearly deducible from the reviewed literature. It seems as if a combination of both approaches is the best way to conduct seatbelt enforcement.

All in all, best practice for the enforcement of seatbelt use seems to be when the police intensify the deployment of (announced) checkpoints and mobile patrols (at night) specifically targeting unbelted vehicle occupants which is additionally accompanied by publicity campaigns.

11 SQ 4: To what extent do the enforcement measures that the two forces apply during their joint control operations comply with enforcement measures that are known to be best practice in the fight against speeding, drink-driving and the non-use of seatbelts?

Before turning to the question whether the enforcement measures applied in the joint control operations of the police forces of Lower Saxony and Oost-Nederland comply to enforcement measures that are known to be best practice, it has to be mentioned one more time that the 'Treaty of Enschede' admittedly allows German police officers to

operate on Dutch territory (and vice versa), albeit with the restriction that if they do so, they are bound to the host's state national law (Deutscher bundestag, 2005, Art. 7). This implies that for control operations on German territory, German law is exclusively applicable, and vice versa, control operations on Dutch territory are governed by Dutch law (Bijkerk, 2014). Joint control operations of the two forces neither create a new sovereign, nor do they undermine the national sovereignty of the respective other country. This means that if for instance German police officers, under the guidance and in the presence of Dutch police officers, participate in a joint control operation on Dutch territory, German police officers cannot apply enforcement approaches or equipment that are permitted to be used under German law, but that are not in compliance with Dutch law.

When asked about enforcement approaches and equipment that are used by the police force of Lower Saxony (and hence also during joint control operations of both forces on the territory of Lower Saxony) for speed enforcement police chief inspector Martin Stallkamp stated the following: "When we conduct speed controls, we make use of two different instruments: On the one hand, we deploy a speed measurement device called ES3.0 manufactured from the ESO GmbH, a German company. This is a fully automated single-side sensor that can be combined with one or two separate digital camera units. The ES3.0 device is not a laser device nor a light barrier device. It is a optical sensor device that determines the speed of a certain vehicle using time/distance measurements. There are five passive optical brightness sensors inserted in the sensor head of the unit. When a vehicle passes the unit, each of the five sensors successively generates a so called brightness profile. The time that the vehicle needs to pass all sensors serves as a basis for the inquiry of the vehicle's speed. If a vehicle passes the five optical brightness sensors with an inappropriate speed, a digital photo is taken automatically" (2004, pp. 3-4).

The executive police director of the police administration Emsland/Grafschaft Bentheim, Karl-Heinz Brüggemann explained that "applying the ES3.0 device is basically a bulk business. The objective of applying this device is to catch as many speed offenders as possible. Thus, applying the ES3.0 device is not a preventive

measure; it clearly is a repressive measure. It is repressive in the sense that road users that drive way too fast will temporarily have their driver's license withdrawn and therefore they do not have the opportunity to repeatedly exceed the speed limit in a period of four weeks. In combination with the German demerit-point-system we intend to increase the pressure on the road user. Road users that collected enough demerit-points to be close to having their driver's license revoked, are assumed to slow down their speed. Applying such bulk business devices provides the police with the opportunity to distribute as many demerit points to speeding road users as possible. So the reaction of the road users is expected to be the following: I do not want to slow my speed down, but with the demerit points that I have already collected, I have no other choice. This is how the police intend to moderate the road safety situation" (2014, p. 7).

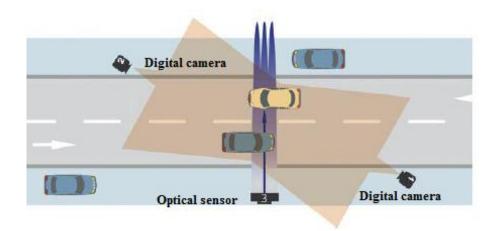


Figure 11- Functioning of ES3.0 (ESO-Elektronik, 2014, p. 7)

In addition to the deployment of the automated ES3.0 device, Brüggemann and Stallkamp both mentioned that the police in Lower Saxony also measure the speed of vehicles "with the help of laser speed guns²² that are either hand-held by a police officer or mounted on a tripod" (Stallkamp, 2014, p. 4). The model that is used by the

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[&]quot;The laser speed gun, as the name indicates, emits infrared light pulses. The time taken for the infrared light pulses to be reflected by a certain vehicle is then used to determine the distance to the vehicle and a number of timed readings are used to calculate the distance over time, the speed" (Stallkamp, 2014, p. 4)

police in Lower Saxony is the "Riegl FG P21, which is manufactured in Austria" (Stallkamp, 2014, p. 4).

According to Karl-Heinz Brüggemann, the laser speed gun, as a physical policing method "is intensively applied, since it inevitably establishes a personal contact with the apprehended driver, which allows the police officer to additionally control for other traffic offences (such as non-use of seatbelts or drink-driving) and criminal offences" (2014, p. 7).

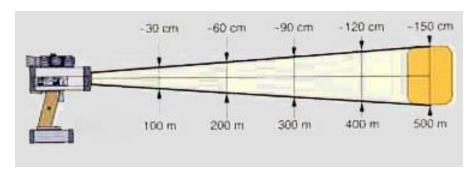


Figure 12- Riegl FG P21 (Riegl, 2014, p. 18)

Martin Stallkamp summarized that "both approaches are more or less overt. It is often inevitable that road users can see the police officer with the laser speed gun who is positioned on a bridge or at the edge of a road. We could of course try to position the police officer with the laser speed gun in such a way, that he is not that easily noticeable for the road user, but principally, the road users would notice the police officer if they kept their eyes open a little bit. The same basically applies to the ES3.0 device. If the road users kept an open eye, they would notice that there is something going on the edge of the road. There are for instance the cables, a suspicious station wagon and sometimes you can even see the braking marks of other drivers on the road that tried to escape punishment" (2014, p. 4).

A comparison between what has been designated as best practice for speed enforcement in the previous chapter (to recall: A mix of highly visible and less visible activities, a mix of physical policing and automated enforcement activities, which are continued over a long time and accompanied by publicity campaigns) and the insights derived from the interviews with Martin Stallkamp and Karl-Heinz Brüggemann, leads to the conclusion that speed enforcement conducted by the police force of Lower Saxony (and hence also speed enforcement that is conducted by both forces during joint controls on the territory of the federal state of Lower Saxony) corresponds to a large extent to what has been designated as best practice for speed enforcement earlier in this report. Deviations from what has been designated as best practice can only be observed in terms of duration (for all joint controls), as the joint controls often only last for twelve to twenty four hours, and the utilization of publicity campaigns, as with the exception of the 'Blitzmarathon', joint controls between the two forces are not accompanied by publicity campaigns. The subsequent section of this report explains why this is the case.

When asked about equipment and enforcement approaches that are used by the police force of Oost-Nederland (and hence also during joint control operations of both forces within the police region of Oost-Nederland), Hans Bijkerk stated that two mobile devices are deployed which automatically detect speeding offences. These are the MultaRadar C device and a device called Multanova 6F. Both devices are distributed by the ROBOT Nederland B.V. company (2014). The devices "are composed of a digital camera, a radar sensor as well as a flash unit und measure the speed of vehicles using the Doppler effect" (Bijkerk, 2014, p. 13). "When the radar device is mounted on a tripod and placed next to the road, speed enforcement takes place in a overt manner- it is basically visible for all road users that keep their eyes open. When the radar device is installed in a car, speed enforcement occurs in a hidden manner. The police in Oost-Nederland makes use of both variants" (Bijkerk, 2014, p. 13).

In addition to the previously mentioned mobile (automatic) radar devices, "the police also makes use of the Ultralyte 100 LR laser gun, which is manufactured by Laser Technology INC., an American company. The Ultralyte laser gun can either be handheld or it can be mounted on a tripod. When the laser gun is used during control operations, it is relatively easy for the road user to detect the police officer who performs the speed measurements. Police officers are often overtly standing on bridges, in roundabouts and at the roadside, or they are sitting in police cars on the side of the

road. Police officers deploy the device to perform speed measurements on rural roads, on motorways or urban areas. In contrast to the mobile radar devices that automatically make a digital evidence photo of speeding offences, the Ultralyte laser gun is not able to produce such a photo. Thus, speeding road users are pursued and pulled over by colleagues of the police officers that perform the speed measurements" (Bijkerk, 2014, pp. 13-14).

Similarly as in the case of the police force of Lower Saxony, the police force of Oost-Nederland (and hence also both forces when they engage in joint controls within the police region of Oost-Nederland) to a large extent enforces speed in accordance with what has been designated as best practice for speed enforcement earlier in this report. Deviations in terms of duration and the accompaniment of enforcement measures by publicity campaigns (for all joint controls except for the 'Blitzmarathon') of course also apply to the police force of Oost-Nederland.

When it comes to the enforcement of alcohol legislation in Lower Saxony, Martin Stallkamp explained that "we detect and apprehend offenders mostly when the road user is stopped in a stationary checkpoint, unless there is an extreme case, if the road user is for instance swerving across lanes. But this only happens in very few cases. According to my estimation, only in 1-2% of the cases, the police will be able to detect alcohol infringements due to the driving behavior" (2014, p. 4).

The police chief inspector further explained that "if road users are stopped in a stationary checkpoint, then we selectively control for alcohol (and drugs). If inspection of the driver's license and the vehicle documents yields an initial suspicion that the driver has consumed alcohol or drugs, in terms of that alcohol odor or abnormalities in the pupillary response as well as abnormalities in language behavior are observed, then the driver is subjected to a breath alcohol test (and/or a drug test)" (Stallkamp, 2014, p. 4). His colleague, Karl-Heinz Brüggemann confirmed this approach.

Based on the insights of how drink-driving enforcement is conducted by the police force of Lower Saxony (and hence also during joint control operations of both forces in the federal state of Lower Saxony), it must be concluded that the approach does not comply with what has been designated as best practice for drink-driving enforcement earlier in this report. To recall, the reviewed literature strongly recommended RBT as a best practice measure for the enforcement of drink-driving. The police force of Lower Saxony, however, applies SBT, where only those drivers suspected to be under the influence of alcohol (or drugs) are subjected to an alcohol test (and/or drug test). An explanation of why this is the case will be given in the subsequent chapter of this paper.

Things are different for the enforcement of alcohol legislation in the Netherlands and in the police region of Oost-Nederland. "Whether the police conducts alcohol checks in stationary checkpoints or pulls over vehicles out of the traffic flow: All drivers are required to participate in a breath alcohol test. In stark contrast to the situation in Germany, the police in the Netherlands does not need an initial suspicion of alcohol consumption in order to subject the driver to a breath alcohol test. What the police does can basically be described as unrestricted or random breath testing. The breath alcohol test device that the Dutch police currently applies is called Dräger Alcotest 9510. The Dräger Alcotest 9510 translates the measured breath alcohol concentration into the presumed alcohol concentration in a person's venous blood using a calibration factor. If the provided breath sample indicates that the person in question is driving a vehicle with a blood alcohol concentration in excess of the maximum permissible legal limit of 0.5 mg/ml, then the person is taken to the next police station. Here, a blood sample is taken in order to determine the person's blood alcohol concentration more accurately. The ascertained blood alcohol concentration is then used for a person's prosecution" (Bijkerk, 2014, p. 12).

Regarding the joint control operations of the two forces under examination Hans Bijkerk additionally mentioned that "during control operations on German ground, German law is exclusively applicable, and vice versa, control operations on Dutch ground are governed by Dutch law" (2014, p. 12). "This implies that Dutch police officers cannot perform random breaths tests as they are used to it from their domestic control operations if they assist their German colleagues, but that they have to have an initial suspicion of alcohol consumption in order to subject the driver to a breath

alcohol test. If, vice versa, German police officers participate in control operations in the Netherlands under the guidance and in the presence of their Dutch colleagues, then Dutch law applies and the German police officers can perform random breath test" (Bijkerk, 2014, p. 12).

Based on the insights derived from the interview with Hans Bijkerk, it must be concluded that the approach for drink-driving enforcement applied by the police force of Oost-Nederland (and the Dutch police in general) complies to what has been designated as being best practice for drink-driving enforcement.

As previously stated (See chapter 9) in this report, "the enforcement of seatbelt legislation only plays a minor role in the cross-border police cooperation endeavors of the two forces" (Bijkerk, 2014, p. 14). While Martin Stallkamp admittedly stated that "we always keep an eye on seatbelts, when vehicles are stopped in a stationary checkpoint" (2014, p. 5), the non-use of seatbelts is not specifically targeted (anymore) during the joint controls of the two forces. According to him, "unbelted vehicle occupants increasingly become some sort of bycatch during cross-border traffic controls that actually have a different emphasis" (Stallkamp, 2014, p. 6). With almost using the same words, Hans Bijkerk confirmed the pronouncement of his German colleague by stating that "seatbelt violations are most of the time only detected if vehicles are stopped in stationary checkpoints that were actually established for control operations with a different focus; as some kind of bycatch in a way" (2014, p. 14).

When the approach that both forces use for the enforcement of seatbelt legislation during their joint controls is compared to what has been designated as being best practice for the enforcement of seatbelt legislation (to recall: Intensified deployment of (announced) checkpoints and mobile patrols (at night) targeting unbelted vehicle occupants which is additionally accompanied by publicity campaigns), it must be concluded that the applied approach largely deviates from what has been designated as being best practice for the enforcement of seatbelt legislation earlier in this report. An explanation for why the observed differences exist, will be given in the subsequent section of this report.

12 SQ 5: How can (potentially) disclosed differences between enforcement measures that are known to be best practice in the fight against speeding, drink-driving and non-use of seatbelts and enforcement measures that are de facto applied during joint control operations be explained by involved police officers?

While there seems to be broad consensus among road safety researchers (see for instance Goldenbeld & Wegman, 2006 and Elvik, Høye et al., 2009) that the effectiveness of police enforcement is larger if it is accompanied by publicity campaigns, the 'Blitzmarathon', however, is the only joint control operation conducted by the two forces (as has been indicated earlier in this report) that is actually accompanied by publicity campaigns (intensive communication about the fatal consequences of speeding and the publication of control locations on the internet and in local and regional media). This state of affairs is based on the fact the 'Blitzmarathon' is the only joint control operation with a clear focus on road safety. All the other joint controls pursue a holistic approach and combine road safety aspects with fighting crossborder crime. In this context, Martin Stallkamp explained that "when it comes to road safety, press and publicity work can be used as a whole different proactive instrument. However, when the prime focus of a certain operation is on fighting crime, then we cannot announce the controls in advance. In the aftermath of a certain operation, we can of course inform the press to report about what we did; maybe not in full detail, but to a certain degree that is reasonably possible" (2014, p. 3). His German colleague, police chief inspector Martin Piepmeyer confirmed the assessment of his German colleague by stating that "during holistic controls, the additional deterrent effect of coupling enforcement activities with preceding publicity campaigns is sacrificed for the sake of apprehending criminals" (2014, p. 3). Hans Bijkerk shared the view of his German colleagues and validated that "certain aspects that could make sense in the preventive road safety work are indeed sacrificed" (2014, p. 7) for joint control operations that primarily intend to fight cross-border crime.

It has been disclosed in the previous chapter of this report, that the way in which the enforcement of alcohol legislation is carried out by the police force of Lower Saxony (and hence also during joint control operations of both forces on the territory of the federal state of Lower Saxony) does not comply with what has been designated as being best practice for the enforcement of alcohol legislation. Despite the fact that there is a general consensus among road safety practitioners of the effectiveness of compulsory testing procedures (RBT), compared with selective approaches (SBT) and the European Commission's urgent recommendation to apply RBT (RBT is twice as effective as SBT), the police in Lower Saxony rely on selective alcohol testing. This circumstance is not due to the fact that the police in Lower Saxony is not aware of the positive effects of applying RBT. As Karl-Hein Brüggemann stated, the application of RBT "would certainly help to simplify our work since police officers would not have to rely on the personal assessment of the situation so much. One might suppose that the application of RBT could increase our apprehension rate- especially for the lower blood alcohol concentrations. If a driver has a blood alcohol concentration that is only marginally beyond the legal threshold of 0,5 g/L and does not show any symptoms of having consumed alcohol, he or she might escape detection" (2014, p. 3).

Martin Stallkamp confessed that "under present circumstances it is quite possible that one or another drunk driver escapes detection. For instance, if a driver does not occasionally show the ocular responses that are typical for someone who consumed alcohol or drugs, or if the driver otherwise makes a good impression and if the police officer does not notice an alcohol odor, then it is possible that the driver is not subjected to breath test or a drug test. The driver then continues the journey. Applying random breath testing could certainly help us, but the Police Act of Lower Saxony simply does not provide such an opportunity" (2014, p. 5). As police officers may only act in accordance with the powers granted to them, "a breath test without any initial suspicion is legally not possible" (Brüggemann, 2014, p. 3) in Lower Saxony.

As has been indicated earlier in this report, the way in which the enforcement of seatbelt legislation is carried out during joint control operations of the two forces largely deviates from what has been designated as being best practice for the enforcement of

seatbelt legislation (to recall: Intensified deployment of (announced) checkpoints and mobile patrols (at night) specifically targeting unbelted vehicle occupants). All interviewees agreed that the enforcement of seatbelt legislation only play a minor role during the joint control operations of the two forces and that unbelted vehicle occupants are not specifically targeted (anymore). This circumstance can mainly be attributed to the fact that seatbelt wearing rates are relatively high in both jurisdictions and that therefore "additional safety gains through increased police enforcement are hard to achieve" (Bijkerk, 2014, p. 4). According to Martin Stallkamp the relatively high seatbelt wearing rates "follow from the fact that the modern vehicles are equipped with an automatic seatbelt reminder systems; at least for the front seats. If the seatbelt is not fastened, the seatbelt reminder emits an annoying noise, which gives the vehicle occupant an extra push to fasten the seatbelt" (2014, pp. 5-6).

"Very helpful in this respect was the so-called car scrappage bonus in Germany, which reduced the number of old vehicles without these seatbelt reminder systems considerably. The advances in the fields of vehicle technology have resulted in the fact that the police can withdraw from seatbelt enforcement to a certain extent" (Stallkamp, 2014, p. 6)

13 Conclusion

The aim of this study was to answer the question of what role the EU's fight against speeding, drink-driving and the non-use of seatbelts plays in the joint control operations of the police forces of Lower Saxony and Oost-Nederland, and if it play a role, as to how far the two forces apply enforcement measures that are known to be best practice to fight the three hazardous traffic offences when conducting joint controls.

In order to find an appropriate answer to this complex question, several sub-questions were developed and gradually answered. From the answers to the five sub-questions, it can be concluded that the EU's fight against the 'three main killers' on EU roads, which is based on a pan-European problem analysis, for the most part turns into a fight against only two 'killers' (speeding and drink-driving) during the joint control operations of the two police forces under examination. While the EU's fight against the non-use of seatbelts still seems to be relevant for Southern- or Eastern Europe (Stallkamp, 2014),

seatbelt wearing rates in Lower Saxony and in the police region of Oost-Nederland are so high, that the enforcement of seatbelt legislation, if at all, only plays a subordinate role during joint controls of the two police forces.

As has been demonstrated throughout this report, for its fight against speeding, drink-driving and the non-use of seatbelts on EU roads, the EU (in line with the principle of subsidiarity) mainly applies soft law-policy making instruments that contain non-binding stipulations on the enforcement of speed, alcohol and seatbelt legislation that should be incorporated in national road safety strategies, national action plans and national enforcement plans. Only a small fraction of the non-binding stipulations is actually concerned with the cross-border enforcement of traffic laws and regulations between the EU Member States. The EU's main claim regarding cross-border police cooperation in the realm of road safety amounts to an increased coordination and sharing of best practices as well as an encouragement to and a generalization of the principle of targeted control campaigns in and between the Member States (European Commission, 2010a).

However, as Hans Bijkerk puts it "the EU's claim for intensified police cooperation with an increased number of joint controls across borders is fair enough, but reality shows that such a claim is sometimes complicated by practical constraints in the realm of road safety" (2014, p. 11). One of the constraints is that "within the EU and its Member States there are entirely different police philosophies and approaches. The Dutch police force for instance applies the opportunity principle, while the German police works according to the legality principle. In the realm of cross-border police cooperation these two principles do not mix that well and sometimes a police forces struggles with the operating principle of another police force" (Brüggemann, 2014, p. 8).

A further problem with cross-border police cooperation in the realm of road safety is that road safety problems are too divergent for a 'one size fits all approach'. Often, the commitment of the police to road safety seems to be locally inspired and "enforcement approaches are developed according to local needs and local problems" (Brüggemann, 2014, p. 5). This state of affairs might endanger the implementation of the EU's claim to encourage and to generalize the principle of targeted control campaigns between the Member States. Reality shows that, when it comes to road safety, "only in a few cases

joint concerns are formulated across-borders"(Brüggemann, 2014, p. 6), and hence, only in a few cases police forces of individual Member States will engage in fighting road safety problems concertedly.

Moreover, in view of the many pressing problems facing police forces, there is a growing trend in the EU Member States to integrate traffic policing into general policing work and to direct police manpower towards other prevailing problems (Kallberg, Zaidel et al., 2006). "As traffic law enforcement is not considered a core policing activity (anymore), the career prospects for police officers active in this area have diminished, and as traffic law enforcement is not seen to be a political priority, the allocation of resources has dwindled" (ETSC, 1999). Ad Hellemons, the former director of TISPOL (as cited in Geuijen, 't Hart et al., 2006) criticized the low priority given to traffic law enforcement by the (national) political communities by stating that "if it is not about terrorism or organized crime, they tend to ignore it, but the reality is that no less than 30% of police officers' available time in Europe is involved in traffic one way or another" (p. 95).

Set against this background, there seems to be an urgent need for a better and cleverer use of traffic police resources in daily police work. In the view of TISPOL, "a strict polarization of police disciplines for crime investigation, public order and traffic law enforcement is hindering the most efficient use of limited police resources. In the future there is a need to use resources effectively and to take a more holistic approach to fighting road crime and safety" (2013, p. 2). In order to "secure the safety and security of European citizens and to deny criminals the use of the roads, TISPOL recommends the moving from a pure 'traffic policing' model to a 'road policing' model where police officers do not exclusively focus on fighting traffic offences but also focus on fighting criminal activities on the roads (2013).

As this study shows, the police forces of Lower Saxony and Oost-Nederland already implemented the 'road policing' model into their cross-border policing endeavors. With exception of the 'Blitzmarathon' that clearly focuses on detecting and apprehending traffic offenders, all the other investigated joint control operations conducted by the two forces follow a holistic approach. Besides legal regulations (as for instance the Police Act of Lower Saxony does not allow police officers to conduct random breath testing),

the moving from a pure 'traffic policing' model to a 'road policing model' sometimes leads to a situation in which measures that are known to be best practice for the enforcement of traffic laws and regulations are not applied for the sake of apprehending criminals (i.e. accompaniment of police activities by publicity campaigns). While the decision of both police forces to conduct joint control operations with a holistic approach might give the impression that they are diluting their efforts away from road safety, all the interviewees stated that they are convinced that the joint control operations of both forces make an important contribution to the road safety situation in the cross-border region- even "if it difficult to demonstrate the effectiveness of the joint controls on a percentage basis or on a scale" (Piepmeyer, 2014, p.)

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Appendix A

Interview with Martin Piepmeyer/ Police chief inspector and coordinator international relations of the police administration Osnabrück, Lower Saxony/Germany: Conducted 11 February 2014

<u>Gössel:</u> What are the objectives of the joint traffic control operations conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL)?

<u>Piepmeyer:</u> The overriding objective of the joint traffic controls conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL) is to improve the road safety situation in the Dutch/German border area. In view of the free movement of persons and goods in the Schengen area, where passport or any other type of border controls were abolished, we came to the conclusion, after thorough examination, that from the point of view of the police it would be sensible to conduct joint traffic controls with our Dutch colleagues. The reasons for this are twofold: On the one hand, if the German police conducted traffic controls at one checkpoint only, then the German police could only either control incoming road users (from the Netherlands) or outgoing road users (towards the Netherlands) at a time. Such a situation would make it impossible to control an area in its entirety as preferred from a traffic police point of view.

On the other hand, the joint traffic control operations help to take actions against common problems on both sides of the border. Here, in particular the increasing number of so-called post-discotheque road traffic accidents give reason for concern. In order to deter young road users from operating a motor vehicle under the influence of alcohol or drugs (or both) during weekend nights, it is important to cover a fairly large area with joint controls. The border between the Netherlands and Germany is no real dividing line where the flow of traffic is interrupted. Young people from Lingen, Nordhorn or Osnabrück travel to Enschede to visit a discotheque there, or they even travel further to visit discotheques in Apeldoorn. Vice versa, young people from Enschede or Apeldoorn like to visit the large-scale discotheque in Schüttdorf. With our joint controls we intend to reach as many young people as possible in order to create the widely perceived impression that those operating a vehicle under the influence of either alcohol or drugs,

or both, will be apprehended and punished. The same also applies to other traffic offences that represent a significant danger to the life and physical safety of the offending road user and others, like driving with excessive speeds or the omission to wear seatbelts.

Gössel: Based on research that I conducted prior to this interview, I figured out that road safety projects of the police are increasingly coupled with initiatives to combat criminals that use the road networks for their illegal activities, like for instance smuggling of drugs or weapons and human trafficking. These operations follow the rationale that road users that are stopped to be tested for alcohol or seatbelts, can also be controlled for criminal offences. Is this approach-that TISPOL refers to as road policing and that is elsewhere sometimes also referred to as multi-agency policing also applied during joint controls conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL)? I ask this question specifically against the backdrop of research that has shown that the deterrent effect of traffic police enforcement can be enhanced by coupling enforcement endeavors with publicity campaigns. Prior to the latest 'Blitzmarathon' the police in Lower Saxony for instance announced in a variety of media like local television, newspapers and the internet that road users are subject to increased speed controls for a given period of time. However, if the primary goal of a specific police operation is combating criminals that use the road networks for their illegal activities, announcing controls beforehand would rather have counterproductive effects, since criminals will then avoid routes where they can expect to be controlled by the police.

<u>Piepmeyer:</u> What you just mentioned is a very important factor for the police cooperation with our Dutch neighbors. In this regard, we like to talk about holistic controls that are in addition to large numbers of police officers also staffed with personnel from other authorities that perform safety-related tasks like customs authorities, employment agencies or what we in Lower Saxony especially appreciate, environmental authorities. The police in Lower Saxony for instance is the only German police administration that signed a contract with the Dutch ILT authority (Inspectie Leefomgeving en Transport); they regularly participate in controls with a holistic

approach on the main traffic arteries in the Dutch/German border area. Pooling competences with the previously mentioned authorities creates an added value to our joint controls. During the holistic controls, we are not only focusing on violations of traffic laws and regulations, but also on other criminal offences. If the police for instance registered a certain criminal offence during a traffic control and would not prosecute that offence because the focus of the control was only on apprehending road users that violate traffic rules, this would be stupid from my point of view. A major problem in this regard is, or was hitherto, the training of the Dutch police officers, which are either specialized in traffic enforcement or in the enforcement of crime. In the early beginnings of the GPT (Grenzüberschreitendes Polizeiteam), the cross-border police team in Bad Bentheim, the Dutch contribution to that team basically only consisted of, let's call them, traffic experts. This circumstance caused that our Dutch colleagues, to a large extent, only apprehended offending road users, while the German colleagues, that are trained as allrounders, apprehended both, traffic offenders and criminals that use the road network for their illegal activities. After intense conversations with the Dutch police leadership we came to the conclusion that it is necessary to deepen the training of the Dutch GPT-members, through for instance sitting in on lectures, in order to prepare them for holistic controls.

The recent trend for the Dutch/German cross-border control operations indeed is to move away from controls that either focus on only apprehending offending road users or only apprehending criminals that use the road network for their illegal activities. Instead the emphasis is more on controls with a holistic approach; where we do both. This is certainly the case for the Korridorfahndung that is roughly executed every three months and according to my knowledge, this also the case for cross-border operations organized under the aegis of TISPOL, which occur several times per year.

In stark contrast to the 'Blitzmarathon', that was according to my knowledge executed only once in October 2012 together with our Dutch colleagues and where the focus was clearly on contributing to road safety by creating the widely perceived impression that road users will be apprehended if they exceed the speed limit, the holistic controls, which as stated earlier also target criminal activities, cannot be announced beforehand. This basically indicates, that during holistic controls, the additional deterrent effect of

coupling enforcement activities with preceding publicity campaigns is sacrificed for the sake of apprehending criminals.

Gössel: What kind of enforcement measures are currently executed in joint traffic control operations conducted by the two forces to deter road users from engaging in risky behaviors, that can be related to road traffic accidents and injuries?

<u>Piepmeyer:</u> For the answer to this question, I would like to refer to my colleague Hauptkommissar (chief inspector) Martin Stallkamp who can provide you with detailed information about the precise enforcement measures that are applied during the joint operations with our Dutch colleagues.

Gössel: Ok, an appointment with Martin Stallkamp was already made. Even without discussing the precise countermeasures that are applied during the joint operations, how effective do you consider the cooperation with your Dutch colleagues from a strategic point of view and what kind of evidence do you have for your judgment? In other words: Why do you think that the joint controls with your Dutch colleagues make sense and why do the police forces of Lower Saxony and Oost-Nederland not just conduct traffic control operations on each side of the border without coordinating them?

<u>Piepmeyer:</u> From a strategic point of view, if we and our Dutch colleagues would conduct traffic control operations on both sides of the border without coordinating them, so that they would for instance take place at different times, this would not be the greatest problem. However, in such a case it is not possible to obtain an overall picture of what actually happened over that period. We are always asked to demonstrate what we achieved-in terms of: So and so many traffic law violations were detected. We are always interested in evaluating our approaches in order to be able to make changes in the future. Do we have to choose a different time? Do we have to make changes to our deployment? Are the controls worth the effort? If enforcement approaches are not coordinated for a given area, it will be hard to evaluate them.

It is difficult to demonstrate the effectiveness of the joint controls on a percentage basis or on a scale, but what we can certainly demonstrate is a certain number of detected traffic offenders or criminals. In the eyes of the observer, it always reads well if we achieved a lot. In order to be able to evaluate whether a control was worth the effort or

not worth the effort, it does not make sense to perform a cost-benefit analysis that compares the costs of a police officer per hour and the fines charged per hour; such a discussion does not lead us anywhere. Taken as a whole, it can be said the joint controls with our Dutch colleagues are always a great success.

What inter alia constitutes the success of the joint controls, is, as stated earlier, the possibility to obtain evaluable results for a certain criminal-geographical area: This and that is happening there- this and that is what we are doing against that.

The arrangements prior to the controls, during the controls and in the aftermaths of the controls require a close cooperation between us and our Dutch colleagues. Over time, the contacts and the exchange of information between our police forces and our Dutch colleagues improved significantly. The constant exchange of information for instance allows us to explain the accumulation of apprehended offences during a certain control....What has happened there? Do we for instance apprehend more drink-driving offenders because of the fact that a new discotheque was opened in the border area? Or, do we apprehend more people smuggling weapons or drugs because a biker gang opened a new chapter in the border area? If we did not regularly exchange information with our Dutch counterparts, things like that would hardly come to our notice and we would not be able to react properly. However, as stated earlier, the level of networking, the cooperation and the exchange of information of the police authorities in the Dutch/German border region improved significantly; and helped both parties to simplify their work.

Appendix B

<u>Interview with Martin Stallkamp/Police chief inspector of the police</u> administration Osnabrück, Lower Saxony/Germany: Conducted 18 February 2014

<u>Gössel:</u> What are the objectives of the joint traffic control operations conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL)?

<u>Stallkamp:</u> When we cooperate with our Dutch colleagues in the border area, the focus is on contributing to road safety and on fighting crime. The joint controls conducted by the two forces can barely be seen in one-dimensional terms as being either purely directed at road safety or fighting crime. Both aspects play a vital role. In order to contribute to road safety and fighting crime, we make use of two central mechanisms, namely prevention and repression.

For creating the greatest possible preventive and repressive effects, it makes sense to coordinate our activities. When we coordinate our activities we can exchange information, bundle our competences and create better possibilities of intervention.

In the past, it used to be the case that the Twente police controlled the incoming traffic to the Netherlands on its own, for instance on the rest area De Lutte. The police of Lower Saxony then suggested performing the controls together in order to create the conditions that allow for an increased exchange of information. What should additionally be kept in mind is that police today has to perform a wide range of tasks in its daily business, here in Germany, but also in the Netherlands. However, for the large-scale operations neither the police in Lower Saxony, nor the police in Oost-Nederland are provided with additional manpower; the police officers that take part in the controls have to be released from their daily work. These are police officers that on the following day, or if we conduct controls during nighttime, then even on the same day, have to return to their daily work. The large-scale controls, therefore entail a certain strain for the police officers. We simply do not have 100 police officers at our disposal that are only responsible for these types of controls; the police officers are mobilized upon request. As far as I know, the situation in the Netherlands is comparable. When we bundle our competences, we can provide for some relief in the respective police forces.

Standing units are rather the exception. The GPT-Team is such an exception. This team is constituted of police officers from the Netherlands and Germany in order to perform cross-border policing tasks.

<u>Gössel:</u> You just said that the joint control operations conducted by the police forces of Lower Saxony and Oost-Nederland are barely one dimensional and that they combine road safety and crime fighting. Could you specify that a little more? What kind of controls are actually conducted and what do they look like?

Stallkamp: For instance, the last joint control operation was conducted from 19 to 20 December 2013. This last joint control operation was a search (Fahndung) operation that primarily targeted tobacco smuggling, human trafficking, smuggling of drugs and weapons, as well as trafficking of stolen cars and burglaries. Basically the focus here is on everything that can be moved across borders. However, even if the prime focus is on fighting crime, road safety aspects also always play a role during this type of joint control operations as for instance driving under the influence or speeding. A good thing about these search operations is that they are not conclusively defined; they are flexible in nature. This basically indicates that there is admittedly some kind of framework or heading, but the police in Lower Saxony and Oost-Nederland have the opportunity to add additional topics. Despite some predetermined processes, both forces can actually additionally do what they consider to be right in order to reach a satisfactory situation. Our Dutch colleagues for instance make use of number plate identification systems and additionally we check for speeding violations. So basically, for operations that we label as 'East-West Search' (Ost-West-Fahndung) or 'Corridor Search' (Korridorfahndung) the heading is crime, but road safety aspects are not excluded. Next to joint control operations that primarily focus on fighting crime, there are also cross-border control operations with a specific focus on road safety, like for instance the 'Blitzmarathon', an intensive 24-hour speed enforcement operation, or the TISPOL operations, in which both forces are involved.

<u>Gössel:</u> I ask this question against the backdrop of scientific literature that deals with deterring road users from engaging in risky behaviors that are related to the occurrence and the severity of road traffic accidents clearly states that the deterrent effect of police operations can be enhanced when the police operations

are accompanied with public information campaigns that announce upcoming traffic control operations. While this might make sense for the road safety area, announcing control operations that target criminals would rather have counterproductive effects.

Stallkamp: That is absolutely right. When the prime focus of a certain operation is on fighting crime, then we cannot announce the controls in advance. When it comes to fighting cross-border crime we have to work in a concealed manner. In the aftermath of a certain operation we can of course inform the press to report about what we did; maybe not in full detail, but to a certain degree that is reasonably possible. In this way the police can sell the positive aspects of their work. Furthermore, this has the side effect that the police can explain where and when citizens can help the police. With the help of press releases the police can sharpen the citizens' awareness by letting them know how a certain criminal or stolen car was detected. Under certain circumstances citizens might then think that they have a helpful hint for the police and they feel encouraged to disclose certain information. This is how press and publicity work can bear fruits in the realm of fighting crime.

When it comes to road safety, press and publicity work can be used as a whole different proactive instrument. In the realm of speed controls, these controls are often announced beforehand, like during the 'Blitzmarathon'. The local media, like newspapers, local television and also websites, intensively informed the public about the upcoming speed control operations. The concrete date for the start of the 'Blitzmarathon' was provided, and sometimes even the concrete locations were announced.

<u>Gössel</u>: If we neglect the crime fighting aspects of the joint control operations and focus on road safety: What kind of enforcement measures are currently executed in joint operations conducted by the two forces to deter road users from engaging in risky behaviors, that can be related to road traffic accidents and injuries?

<u>Stallkamp</u>: When we conduct speed controls, we make use of two different instruments: On the one hand, we deploy a speed measurement device called ES3.0 manufactured from the ESO GmbH, a German company. This is a fully automated single-side sensor that can be combined with one or two separate digital camera units. The ES3.0 device is not a laser device nor a light barrier device. It is a optical sensor device that determines

the speed of a certain vehicle using time/distance measurements. There are five passive optical brightness sensors inserted in the sensor head of the unit. When a vehicle passes the unit, each of the five sensors successively generates a so called brightness profile. The time that the vehicle needs to pass all sensors serves as a basis for the inquiry of the vehicle's speed. If a vehicle passes the five optical brightness sensors with an inappropriate speed, a digital photo is taken automatically.

On the other hand, we measure the speed of vehicles with a laser speed gun that is either hand-held by a police officer or mounted on a tripod. The model that we use in our police administration is the Riegl FG P21, which is manufactured in Austria. The laser speed gun, as the name indicates, emits infrared light pulses. The time taken for the infrared light pulses to be reflected by a certain vehicle is then used to determine the distance to the vehicle and a number of timed readings are used to calculate the distance over time, the speed.

Both approaches are more or less overt. It is often inevitable that road users can see the police officer with the laser speed gun who is positioned on a bridge or at the edge of a road. We could of course try to position the police officer with the laser speed gun in such a way, that he is not that easily noticeable for the road user, but principally, the road users would notice the police officer if they kept their eyes open a little bit. The same basically applies to the ES3.0 device. If the road users kept an open eye, they would notice that there is something going on the edge of the road. There are for instance the cables, a suspicious station wagon and sometimes you can even see the braking marks of other road users on the road that tried to escape punishment.

When it comes to alcohol and seatbelts enforcement, we detect and apprehend offenders mostly when the road user is stopped in a stationary checkpoint, unless there is an extreme case, if the road user is for instance swerving across lanes. But this only happens in very few cases. According to my estimation, only in 1-2% of the cases, the police will be able to detect alcohol infringements due to the driving behavior. The problem with some people is, that they are used to a certain level of alcohol or drug consumption. They therefore barely show symptoms of deficiency when they take the wheel after having consumed alcohol or drugs.

If road users are stopped in a stationary checkpoint, then we selectively control for alcohol and drugs. If inspection of the driver's license and the vehicle documents yields an initial suspicion that the driver has consumed alcohol or drugs, in terms of that alcohol odor or abnormalities in the pupillary response as well as abnormalities in language behavior are observed, then the driver is subjected to a breath alcohol test or a drug test. Thus, our entry into the control procedure is always the inspection of the driver's license, vehicle documents as well as the usual procedures during traffic controls like inspection of the warning triangle, first aid kit, MOT certificate (TÜV-Bescheinigung), etc. .

In the Netherlands, things are different. All road users that are stopped in a stationary alcohol checkpoint are directly subjected to a breath alcohol test. Here, 100% of the road users that enter a alcohol checkpoint are required to blow into a breath alcohol device. These practices are legally acceptable in the Netherlands. Subjecting road users to the breath test is basically how the control procedure is initiated. As you can see, the control mechanism in the Netherlands is different to the one in Germany.

Gössel: Ok, so if I understood correctly, then in Germany there always has to be some kind of an initial suspicion before the police can require the road user to participate in a breath alcohol test. In the Netherlands, they seem to apply what is often referred to as random breath testing (RBT), which are random alcohol controls during which all the road users that are stopped are also systematically subjected to alcohol tests. I read an article from Mark Vollrath, who stated that if the German police conducted random breath testing, more intoxicated road users would be apprehended. According to him, only one in 590 journeys with an illegal blood alcohol concentration are apprehended.

<u>Stallkamp:</u> Yes, that is true. Under the present circumstances it is quite possible that one or another drunk driver escapes detection. For instance, if a driver does not occasionally show the ocular responses that are typical for someone who consumed alcohol or drugs, or if the driver otherwise makes a good impression and if the police officer does not notice an alcohol odor, then it is possible that the driver is not subjected to breath test or a drug test. The driver then continues the journey. Applying random breath testing could

certainly help us- but the police act of Lower Saxony simply does not provide such an opportunity.

<u>Gössel:</u> After having shed light on the enforcement of speed and alcohol/drugs, could you also tell me something about seatbelt enforcement?

Stallkamp: The question if vehicle occupants wear seatbelts is still relevant during our traffic control operations. This applies to our joint traffic controls with our Dutch neighbors, as well as to the pan-European TSIPOL control activities. When vehicles are stopped in a stationary checkpoint, we always keep an eye on seatbelts. However, it must be said that the proportion of drivers wearing seatbelts is relatively high in Germany. This follows from the fact that the modern vehicles are equipped with an automatic seatbelt reminder systems; at least for the front seats. If the seatbelt is not fastened, the seatbelt reminder emits an annoying noise, which gives the vehicle occupant an extra push to fasten the seatbelt. Very helpful in this respect was the socalled car scrappage bonus in Germany, which reduced the number of old vehicles without these seatbelt reminder systems considerably. The advances in the fields of vehicle technology have resulted in the fact that the police can withdraw from seatbelt enforcement to a certain extent. Thus, unbelted vehicle occupants increasingly become some sort of bycatch during traffic control operations that actually have a different emphasis, as the omission to wear seatbelts is not a major problem in Germany anymore; the situation in Southern- or Eastern Europe, however, presents a different picture. In Germany, the omission to wear seatbelts is mainly only a problem for trucks and buses. Here, we still apprehend quite some drivers that are unbelted.

Gössel: After having described the applied enforcement measures: How effective do you think that these measures are and what kind of evidence do you have for your judgment?

<u>Stallkamp</u>: That is a good question. This is of course first of all a question of how you would define effectiveness. I guess that this question is first of all concerned with how well we manage to apprehend for instance road users that exceed the speed limit when we conduct traffic control operations. As stated earlier during this conversation, we deploy laser speed guns and the ES3.0 device when we conduct speed enforcement operations. According to my knowledge, these devices are state-of-the-art when it

comes to mobile speed enforcement. The classical radar devices that were either mounted on a tripod or installed in a car that was parked on the edge of the road, were pretty prone to errors. These devices are incrementally phased out. Classical radar devices determine the speed of a passing vehicle with the help of emitted electromagnetic waves that are reflected by the vehicle that are then captured with a sensor on the radar device. The ES3.0 provides better results, since it is possible, to also determine the speed of a vehicle that is for instance switching lanes or of a vehicle driving on a curved path. The laser speed gun generates similarly good results, provided that the police officers are well trained and familiar with that device.

When it comes to the apprehension of road users that operate their vehicle with an illegal blood alcohol concentration, I already said that the application of random breath testing could certainly improve our achievements. Due to the fact that the police act of Lower Saxony does not provide such an opportunity, we simply cannot deploy such an approach. Nevertheless, I am convinced that we still apprehend the majority of road users that are operating their vehicle with an illegal blood alcohol concentration. This is also shown by the statistics of the alcohol enforcement operations.

One should not confine the assessment of the effectiveness of the joint traffic controls to the individual enforcement measures. The exchange of knowledge and experience also plays a fundamental role. If we conduct the control operations together, everybody can take something home. Our Dutch colleagues can for instance say: Ok, now we saw how our German colleagues handled that situation, that was good, we will also do it in a comparable manner the next time. And vice versa, the police officers of Lower Saxony can also be directly advised on how they could improve a certain enforcement approach. Sometimes, these joint traffic control operations really work as a melting pot of new influences, new ideas. How do we initiate the control operation? How do we select vehicles? Which principles do we work by today? How did we reach a certain result? Endless opportunities. This means that we have got our fingers on the pulse of time, if it is a matter of exchanging experiences and new ideas with our Dutch colleagues.

The truth is, that we cannot mitigate all the potential threats to citizens' security. The police in Lower Saxony simply does not have sufficient financial means for that. As you know, the responsibility for traffic enforcement falls into the remit of the federal states,

the Länder. We in Lower Saxony simply do not have the time, the equipment nor the financial means to always be up to date in all respects of traffic enforcement. We just try to do everything in our power to sustainably improve the effectiveness of our traffic control operations. The cooperation with our Dutch colleagues is extremely helpful in this regard. What basically constitutes the effectiveness of the joint traffic control operations is the creation of a network of police officers in the operative field. Due to the close cooperation, I have a contact person in every domain. I can contact a certain person for this domain, for another domain I have a different contact person. In this regard, we really cooperate effectively- and have done for 15 years. Altogether, it is very pleasing what we achieved thanks to our cooperation.

Appendix C

Interview with Karl-Heinz Brüggemann/Executive police director of the police administration Emsland/Grafschaft Bentheim, Lower Saxony/Germany: Conducted 24 February 2014

<u>Gössel:</u> What are the objectives of the joint traffic control operations conducted by the police forces of Lower Saxony (GER) and Oost-Nederland (NL)?

Brüggemann: The driving force is, that the police in Lower Saxony and Oost-Nederland have analyzed the road safety situation in their distincts. During the analysis, we discovered that we have comparable problems. A main cause of road traffic accidents is speed, especially for young and inexperienced road users. Alcohol and drugs are also common causes of accidents. Here, our main focus is also on young road users, aged between 18 and 24 years. Speed, alcohol and drugs are the main causes of road traffic accidents and young road users are the main group at risk. This is the case on this side of the border and also on the other side of the border. Therefore, one inevitably comes to some kind of a common way of thinking.

However, it must be stated that there is no concerted cross-border road safety concept between Lower Saxony and Oost-Nederland. The pooling of interest basically occurs due to Europe, the EU, where certain aspects of road safety are placed on the agenda: Speed, alcohol, seatbelts, etc. . Such an agenda-setting is based on a pan-European problem analysis. In Germany, however, the percentage of drivers wearing seatbelts is more than 90%. Thus, it is highly questionable if the omission to wear seatbelts is really a problem in Germany- I guess not. We have different concerns and needs in Germany. There are admittedly common problems like speed, alcohol and drugs, but there is no concerted cross-border road safety concept. The joint traffic control operations are rather of an intermittent, selective, nature. If you for instance take a look at the 'Blitzmarathon': Speed enforcement took place in parallel, but it was not really harmonized or intensively coordinated.

<u>Gössel:</u> I had the chance to talk to your Dutch colleague Hans Markerink on the phone. During that telephone conversation he told me that the Netherlands do not

intend to be part of the upcoming 'Blitzmarathon'. According to him, when it comes to cross-border control operations, the focus of the Dutch police is as of 2014 rather directed towards fighting crime, and the road safety work is unfortunately increasingly sacrificed for that.

Brüggemann: In the road safety area we are always concerned with the question what actually forms the decisive catalyst for the success of police activities. According to scientists, the most important catalyst for deterring road users from committing traffic offences is the certainty of apprehension. This implies that the road user evaluates the risk of being apprehended by the police, something that scientists refer to as the subjective risk of apprehension. The subjective risk of being apprehended, or the road users' perceived risk of being apprehended for traffic offences, can be influenced by the objective risk of apprehension. The objective risk first of all depends on the actual enforcement pressure that is exerted by the police. Besides the enforcement pressure exerted by the police, the certainty of being sanctioned as well as the amount of the sanction also play a pivotal role.

The 'Blitzmarathon' only lasts for 24 hours. The basic principle for the 'Blitzmarathon' is as follows: Say what you do, but also do what you say! If the police announce that speed enforcement activities are intensified for a certain period of time, then the police also actually have to intensify the level of enforcement. Otherwise road users condemn the police as untrustworthy. The initiators of the 'Blitzmarathon' assume that it does not only generate some kind of adaptive behavior for a period of 24 hours, but that it can really change road users' behavior in a sustained manner. I simply do not presume that the 'Blitzmarathon' sustainably changes behavior. The 'Blitzmarathon' manages to give greater prominence to the topic of speeding and the concomitant problems in the medianot more. That is why I can understand the statement of Hans Markerink. Aside from that, there are also fundamental differences in the modes of operations of the police forces of Lower Saxony and Oost-Nederland. We for instance noticed that the Dutch police officers, that are part of our cross-border police team, the GPT, put a great emphasis on traffic offences that can be detected easily, like for instance the omission to wear seatbelts, illegal use of mobile phones or the failure to comply with overtaking bans. This is basically due to the fact, that in the Netherlands, there is some kind of a contractually agreed upon financial reward system for the police. If the police in Oost-Nederland for instance collect fines for traffic offences in the amount of one million Euro, then ten per cent of the money flows back to the police in Oost-Nederland. If they collect two million Euro, then fifteen per cent of the money flows back to the police in Oost-Nederland and if they collect 3 million euro then even thirty per cent of the collected fines go back to the budget of the police force of Oost-Nederland. If the police is partly financed by the fines they collect, then the motivation is of course high to apprehend a large number of offending road users. In stark contrast to that situation, there is no financial benefit for the German police in apprehending a high number of offending road users. Here, road safety aspects are in the forefront.

<u>Gössel:</u> Coming back to what you stated earlier during this conversation: You said that there is no concerted cross-border road safety concept for the two forces and that joint traffic control operations are rather of a sporadic, selective nature?

Brüggemann: Yes, that is true. Regarding the enforcement of alcohol, drugs or speed, there are indeed only a few cases where we work together across borders. Regarding the enforcement of speed we already talked about the 'Blitzmarathon'. Regarding alcohol and drugs, we for instance conduct joint control operations in the community of Uelsen. In Uelsen, there is a discotheque called 'ZAK'. 90% of the guests of 'ZAK' are Dutch. During weekend nights, we conduct joint controls in the close proximity of the discotheque. When we for instance plan to conduct an alcohol control operation, then we inform our colleagues in Oost-Nederland about our endeavors and we control the departing traffic together. The German police officers control the departing traffic going west.

Gössel: Regarding the alcohol control operations, I have another question: In a previous interview I learned that in Germany there always has to be some kind of an initial suspicion before the police can require the road user to participate in a breath alcohol test. In the Netherlands, they seem to apply what is often referred to as random breath testing (RBT), which are random alcohols controls during which all the road users that are stopped are also systematically subjected to alcohol tests. I read an article from Mark Vollrath, who stated that if the German police conducted random breath testing, more intoxicated road users would be

apprehended. According to him, only one in 590 journeys with an illegal blood alcohol concentration are apprehended.

Brüggemann: We endeavor a ratio of one to four. That means that for one road traffic accident caused by drink driving, we have to apprehend four drunk drivers that did not cause a road traffic accident. In 2013 we reached this objective. In the Netherlands, road users have to participate in breath tests when they are stopped by the police. If they refuse to participate, the police automatically treats the road user as being drunk- with all the legal consequences. The situation in Germany is different. A breath alcohol test without any initial suspicion is legally not possible. However, it is incumbent upon the police officer to decide about what actually causes a suspicion that justifies a breath alcohol test. Possible reasons for being subjected to a breath alcohol test could be that a driver switches lanes without signalizing, the failure to stop at a red traffic light or operating a vehicle with defective vehicle illumination. After having stopped a suspicious car, the police officer could in the subsequent conversation with the driver come to the conclusion that the driver consumed alcohol or drugs. What then follows is that the police officer offers a pre-alcohol and/or drug test to the driver, that can either be approved or rejected by the driver. If the driver rejects to voluntarily participate in the pre-test, there is even more reason for the police officer to suspect the driver of having consumed alcohol and/or drugs. The driver is then subjected to submitting a specimen of blood- even against the will of the driver. The intriguing question is whether the application of random breath testing could improve our apprehension rate. It would certainly help to simplify our work since police officers would not have to rely on the personal assessment of the situation so much. One might suppose that the application of random breath testing could increase our apprehension rate- especially for the lower blood alcohol concentrations. If a driver has a blood alcohol concentration that is only marginally beyond the legal threshold of 0,5 g/L and does not show any symptoms of having consumed alcohol, he or she might escape detection. Only recently we stopped an Eastern European truck driver who had a blood alcohol concentration of 3,0 mg/ml. The police officer who controlled the truck driver reported that no symptoms of alcohol consumption could be detected. The questions always remains: Drinking driver or driving drinker? Some drivers are just so used to alcohol consumption that the police officer cannot always recognize at the first glance if alcohol was consumed.

Altogether, it can be said that there are different causes for road traffic accidents in the Netherlands and Germany and that the police officers in both jurisdictions have different legal options at their disposal. The legal systems in both countries are fundamentally different. In the Netherlands, the legality principle (Legalitätsprinzip) is not applied: The legal system in the Netherlands does not demand compulsory prosecution of all infringements.

<u>Gössel:</u> No, here they apply what is called the opportunity principle (the expediency principle).

Brüggemann: Indeed. Here, the prosecutor is permitted to refuse the exercise of prosecution if there is for instance no public interest in a certain case. Regarding crossborder operations, we constantly recognize that there are fundamental differences in the legal systems of both countries. The opportunity principle in the Netherlands even goes so far that a person can obtain ownership of stolen goods. It is unthinkable in Germany that something like this could happen. What you can see from that is that they utilize fundamentally different legal systems with fundamentally different prosecution facilities. A further fundamental difference is the distribution of the collected fines: In the Netherlands a certain amount of the collected fines flow back to the regional units of the police, while in Germany the police has no benefit at all from the collected fines. Here, the police conducts road safety work regardless of whether it reaps benefits or not. In Germany the fines are collected in order to create learning effects, since the behavior of some people can only be influenced by hitting them where it hurts, in their wallets. Only if the risk of apprehension is high and if there is a high certainty of financial penalties for traffic law infringements, the police will be able to influence behavior. However, the Dutch police puts a great emphasis on traffic offences that can be cashed up easily, like for instance the omission to wear seatbelts, illegal use of mobile phones or the failure to comply with overtaking bans. The Mulder Law (Wet Mulder) guarantees the police in the Netherlands a secure source of income- an income that is deeply included in the police budget planning process.

Given that the approaches towards road safety work are highly distinct in both countries, joint traffic police operations conducted by the police forces of Lower Saxony and Oost-Nederland are also just of an intermittent, ad hoc, nature. There is no common concept or strategy in a sense of: Ok, those are issues that we should commonly tackle in the future.

Additionally, some police regions in the Netherlands do not essentially have the same road safety problems as we do have in Lower Saxony: In the Emsland region we do have a well-developed roadway network that allows road users to drive relatively fast. Here, collisions with trees are a major problem. Other geographical regions do not have comparable problems. The police would then of course also not come to the idea to shift their enforcement focus into this direction. Even within Lower Saxony different regions have different problems and the police develop specific enforcement programs according to their local problems. If police enforcement programs do not necessarily have the same focus within Lower Saxony, how could they have the same focus across national borders? All in all, there is only some overlap in one or another case and therefore our cooperation endeavors are also only of an intermittent, ad hoc nature. As already stated earlier there are only some situations that trigger joint traffic control operations, like for instance a discotheque in the border region or a common accident prone route like for instance federal highway (Bundesstraße) B 402 that connects Lower Saxony and Oost-Nederland- but again: It is not the case that we do road traffic accident analysis together.

Gössel: In a previous interview that I conducted with your colleague Martin Stallkamp, I have discovered that cross-border control operations are barely one dimensional and that both aspects, road safety and fighting crime play a role when the police forces of Lower Saxony and Oost-Nederland decide to work together.

<u>Brüggemann:</u> That is indeed the case. In this regard, there are two types of controls. On the one hand, there is the so called 'East-West Search' (Ost-West-Fahndung). Here, we basically conduct control operations along the Europe route E30, from Amsterdam to Warsaw. Here our Polish colleagues are also involved. On the other hand, there is the so-called 'Corridor Search' (Korridorfahndung), where we conduct control operations along the Dutch/German border, basically from the North Sea to the German city of

Aachen, in North Rhine-Westphalia. These two types of control operations are coined by, what we call, the holistic approach. Holistic in the sense that both aspects of road safety and fighting crime play a role. Of course, the motorway is first of all a major traffic artery, but it is also a crime scene, one should not forget that! With control operations that follow a holistic approach, there is a clear added value to our police work and we therefore come to an agreement to perform these types of operations relatively quickly with our Dutch colleagues.

What we for instance do twice a year in Schüttdorf, is that we conduct control operations offside the motorway. One small element of these control operations are actually heavy duty vehicle controls, where we for instance control for load securing and driving/resting periods. Via modern media, like mobile phones, facebook and all that, it is most likely that the information that the police is conducting control operations that target 40-ton trucks is spread. Drug smugglers and other criminals then think that they are not the prime target of the control operations, so that they decide to take the risk and cross the border anyway. In parallel to the heavy duty vehicle controls, we then also conduct control operations that target those criminals that fell into the trap of thinking that they are not the intended target of the police during that day. This type of control operation has already been conducted for more than ten years. The criminal activities that are mainly targeted encompass the following: Human trafficking, smuggling of drugs and weapons, as well as trafficking of stolen cars, cargo theft and trafficking of stolen goods; basically everything that presents a problem in both countries.

The commitment to road safety is far more local. That is the way it is. Certain enforcement approaches are developed according to local needs and local problems. Common cross-border enforcement approaches only make sense as in the case of the discotheque in Uelsen where the police says: Ok, we have a discotheque in the cross-border region that is visited by youngsters from both countries- here we try to improve the road safety situation across borders by creating a joint prevention and repression approach. But honestly, I am not really interested in the control approach on the Dutch side of the border. Once the Dutch youngsters left the parking lot of the discotheque, they are back in the Netherlands after a few kilometers and fall into the jurisdiction of

the Dutch police with all the problems and sorrows that they might create. The youngsters then fall into the jurisdiction of the Dutch police officers who are more extensively budgeted for road safety tasks than the police is in Lower Saxony. But that of course also indicates that the Dutch police only do what it is budgeted for: Performing road safety tasks in the Netherlands, not in Germany. Performing road safety tasks in Germany is thus not on the agenda of the Dutch police and this where the responsibility for road safety has to be divided. Concerning heavy duty transport and commercial passenger transport there are in fact Europe-wide problems. Driving and resting times are a problem in all European countries. The same applies to trucks with technical deficits and inadequately secured cargo. It does not make a difference if ten tons of steel come off a truck in Bulgaria, Germany or the Netherlands: No matter who the steel falls on, it will most likely have lethal consequences. So those are road safety aspects where joint traffic controls can be agreed upon relatively quickly. Alcohol and drugs, speed and seatbelts are road safety aspects with a more local focus. As I stated earlier: The police in Hamburg or Bremen might just have different needs and sorrows than we do in Lower Saxony. For them, collisions with trees do not present a problem. Also, speeding on rural roads does not constitute a problem for the police in these cities. Here, other road safety problems play a role. Thus, the road safety problems of a certain region also depend on the road network, the environment and all these varying factors. And that is also the case for cross-border road safety endeavors. Road safety work is mostly locally inspired! Only in a few cases joint concerns are formulated acrossborders.

Gössel: Ok. But what is about the pan-European control activities that occur under the aegis of TISPOL? On the TISPOL website you can for instance see that countries like Bulgaria and Rumania or Spain and France increasingly conduct joint traffic control operations along their borders when TISPOL schedules targeted control activities in the realm of speed enforcement or seatbelt enforcement?

Brüggemann: The police in Lower Saxony also take part in the pan-European control activities scheduled by TISPOL that occur under the following headings: Seatbelt, speed, alcohol/drugs. In my opinion these TISPOL control activities have a similar

effect on road safety as the 'Blitzmarathon' has: The only difference is that these control activities last for 72 hours and the 'Blitzmarathon' only lasts for 24 hours. That implies that for three days a situation is created where considerably more enforcement takes place. By sending out more police officers on the road it is only natural that media attention is generated and therewith certain problems are highlighted. If the police conduct intensified seatbelt enforcement operations, the question of the effectiveness of these operations arises. How long do the effects of highly publicized seatbelt enforcement last? Another very important question in this regard is always if the omission to wear seatbelts is really a local problem? Is that relevant for the police? If I take a look at my road traffic accident statistics, then the omission to wear seatbelts is not a problem here. We once assumed that the illegal use of mobile phones would constitute a problem here, but this is not the case.

<u>Gössel:</u> Your colleague, Martin Stallkamp, shares this point of view. According to him seatbelt enforcement is not as intensively applied as it used to be in the past.

Brüggemann: In Germany, we have a seatbelt rate of 90%. Our issue remains the safe transportation of children! Do they have a proper child restraint seat? Do they have any child restraint seat? Those are questions which are of relevance for us. Vehicles nowadays are to a large extent equipped with these seatbelt reminder systems that emit an annoying noise if the seatbelt is not fastened. Vehicle occupants want to avoid the annoying noise and belt up voluntarily.

<u>Gössel:</u> Ok. Regarding speed enforcement: What kind of measures are applied here? For instance during the Blitzmarathon?

Brüggemann: The question of which measures we apply, is apriori a question of the objectives that a particular operation wants to achieve. Due to the fact, that no photo is created when we make use of the laser speed gun, it only makes sense to use this device if we intend to stop the vehicle that exceeded the speed limit. We make use of the laser speed gun mostly in the proximity of schools, kindergartens and retirement homes. Back in the days, what followed the stopping of a vehicle that exceeded the speed limit, was, what we called the educational road safety conversation with the driver. However, there are scientific investigations that actually state that such an educational conversation does not make any sense at all. The time that people gained by exceeding

the speed limit is basically lost when the police stops the vehicle. If the police then additionally wants to have an educational conversation with the speed offender, then even more time is lost. That indicates that the longer the conversation takes, the more annoyed the driver will be. The apprehended driver then either reacts angrily, or behaves tactically and nods in agreement. The driver will then to pretend to fully understand why he was stopped and that speeding is dangerous, but actually, the driver only wants to continue the journey as quickly as possible. Nevertheless, I still perceive the stopping of speeding vehicles as a valuable approach-simply because the police officer then also has the opportunity to control the driver's license and other road safety offences, as for instance, alcohol and drugs or seatbelts. Thus, the laser speed gun is intensively applied, since it inevitably establishes a personal contact with the driver which allows the police officer to also control for other offences, including criminal offences. That is a major advantage of using the laser speed gun.

What we additionally apply to apprehend speeding road users is a speed measurement device called ES3.0. This is speed measurement device that makes use of an optical sensor in order to determine the speed of a vehicle using time/distance measurements. This device can be combined with two digital camera units: A front and a rear camera unit. The rear camera unit provides the police with the opportunity to also apprehend speeding motorcyclists. When we apply the ES3.0 device, offending road users are not stopped. They will only know that they were caught by the police once the speeding ticket is issued Applying the ES3.0 device is basically a bulk business. The objective of applying this device is to catch as many speed offenders as possible. Thus, applying the ES3.0 device is not a preventive measure; it clearly is a repressive measure. It is repressive in the sense that road users that drive way too fast will temporarily have their driver's license withdrawn and therefore they do not have the opportunity to repeatedly exceed the speed limit in a period of four weeks. In combination with the German demerit-point-system we intend to increase the pressure on the road user. Road users that collected enough demerit-points to be close to having their driver's license revoked, are assumed to slow down their speed. Applying such bulk business devices provides the police with the opportunity to distribute as many demerit points to speeding road users as possible. So the reaction of the road users is expected to be the following: I do not want to slow my speed down, but with the demerit points that I have already collected, I have no other choice. This is how the police intend to moderate the road safety situation. In 2013, the police in Lower Saxony stepped its speed enforcement activities up by 50%. That means that far more speed measurement devices were brought onto the road at times when speeding has the most effect on road safety levels. Therefore, the police also conduct speed enforcement operations on Saturday night, when young people drive to the discotheque and back. To effectively influence the road user's subjective risk of apprehension, the police constantly has to analyze the most suitable moment for conducting speed enforcement operations. We have to get the mix right and should never be predictable.

Just once more for the sake of clarity: The subjective risk of apprehension depends on how intensively and how visibly the police conducts traffic enforcement. In combination with the amount of the expected penalty, this is what creates the deterrent effect for road users. However, regarding the amount of penalties, there is a lot of room for improvement in Germany. In my perception, penalties are still way too feeble in Germany. Regarding the visibility of traffic enforcement, the main principle that counts is: Say what you do, but also do what you say! If the police announce that enforcement is intensified, then the road user also has to recognize that the level of enforcement is stepped up! Only then the police is able to create a deterrent effect. Furthermore, it is important that the results of a certain traffic control operation are published in the media. The police is then able to show that a certain amount of traffic offenders was apprehended and the individual road user will then start to think: Ok, the next time I infringe traffic rules, there is a high degree of certainty that I will also be apprehended by the police! If the police is able to instill such a feeling among road users, the police is well positioned.

Another central question that the police is dealing with, is the following: What is the length of time that effects of enforcement on drivers' speed behavior continue after the enforcement has ended? Does the police have to conduct speed enforcement operations on a daily basis? Or is it sufficient to conduct speed enforcement every three weeks? How long does the time-halo effect last and when do we have to show the road user that we are still there? Those questions are raised here in Lower Saxony, but certainly also in

Oost-Nederland. If the police combines its enforcement activities with media reports ingeniously, then the police can afford to decrease the enforcement pressure for a certain period of time. But after that period of time has passed, then the police has to conduct highly visible enforcement activities again. It is up to the police to gradually figure out for how long they can decrease the enforcement pressure and when the enforcement pressure has to be increased again. How long does the time halo-effect last? That is the gripping question!

The abolishment of the internal European borders caused the disappearance of isolated areas of control in Europe. Before Schengen, certain criminal acts and also certain road safety offences stopped at the internal borders, since the borders simply were not impenetrable. The abolishment of internal border controls evoked the appearance of a number of certain cross-border problem areas. As a consequence, politics came to the conclusion that the police forces of the EU Member States should cooperate more intensively so that the control vacuum created by the abolishment of the internal border controls can be filled again. The louder some people expressed their concerns about an EU without internal border controls, the more distinct the political demand to intensify police cooperation endeavors across borders became. Due to the fact that not all political currents are unanimously in favor of an EU without internal border controls, there are even some voices raised to reintroduce the internal border controls. For the police, this would also sometimes facilitate the daily work. The problem within the EU and its Member States simply is that there are entirely different police philosophies and approaches. The Dutch police for instance applies the opportunity principle, in Germany the police works according to the legality principle. In the realm of cross-border police cooperation these two principles sometimes do not mix that well and sometimes a police force struggles with the operating principle of another police force. My Dutch colleague is given a certain mandate and he works according to that very mandate, while I work according to the mandate that I was given. Of course we sometimes wish to cooperate across borders more closely and intensively, but this is not always easy, especially in the road safety area.

While there are certain governmental organizations like Interpol, Europol or CEPOL that coordinate and expedite the fight against crime at the European level, in the road

safety area there is only TISPOL, a non-governmental organization without a great deal of legal weight. This situation is already problematic for Germany alone: While the Federal Crime Police Office (BKA) represents the Federal Republic of Germany in Europe when it comes to fighting crime, there is no comparable German institution in the road safety area. In the road safety area, the traffic officers (Verkehrsreferenten) of the sixteen federal Ministries of the Interior have to come to an agreement, who actually takes over the task of representing Germany in TISPOL. However, the sixteen federal states in Germany sometimes speak with sixteen different tongues. Formulating joint concerns and joint solutions for Germany is therefore sometimes already a vital problem. On the European level, things then become even more complicated.

Gössel: Ad Hellemons, a former director of TISPOL said during a personal conversation with me that while police cooperation in the EU moves ahead in most of it spheres of jurisdiction, road safety is sidelined. There admittedly is some EU law, like the Directive facilitating the cross-border exchange of information on road safety related traffic offences and the Regulation on the harmonization of certain social legislation relating to road transport, but in many other aspects of road safety the Member States still enjoy a large degree of autonomy.

Brüggemann: For May 2014 CEPOL for instance scheduled a meeting of European road safety experts. These road safety experts will then be witness of a large scale heavy duty vehicle control at the Dutch/German border. I do not think that road safety experts from all over Europe would come together to observe a joint traffic control operation in the realm of alcohol or seatbelts. Regarding alcohol or seatbelts, there is no Europe-wide problem. In Germany the number of road traffic casualties declined from 23.000 in 1971 to approximately 3250 in 2012. If you compare the current road safety situation in Germany with that of other European countries, like for instance Poland, Latvia or Lithuania, then you really have to ask yourself if there is a common problem? Do we have a comparable problem with seatbelt rates in Germany? Do we have a comparable road network or are there fundamental differences? Besides the fundamental differences in the number of road traffic casualties, there are also fundamental differences in the operating principles of the police forces and in the legal positions. In Austria, road users have to participate in breath tests, so do road users in the Netherlands. In Germany, this

is not the case. The Netherlands did not just develop the Mulder Law in order to improve the road safety situation; they also developed the Mulder Law because an insufficient number of road safety offenders paid their fines. The Dutch judiciary created a new law that is economically attractive, since it enables Dutch authorities to cash in almost 100% of the fines. Of course, one could argue that the Mulder Law was brought forward in order to improve the road safety situation. The initial motivation, however, was of a different kind.

Concerning the directive facilitating the cross-border exchange of information on road safety related traffic offences: What do you think that the initial motivation was to bring that directive forward on the EU-level? Do you think that the motivation primarily was to improve the road safety situation in the Member States, or was the directive motivated by improving the revenue situation in the Member States? What you have to take in consideration is the following: The traffic authorities in the Member States heavily invested in devices and personnel to cash in the fines of offending road users. There is a whole market behind it. However, if five out of ten speeding road users are caught by the police or by a stationary speed camera of a certain municipality, but they do not pay the fines because their vehicle is registered in another Member State, this is a highly unsatisfactory situation. It other words: Such a situation is uneconomical.

For me the gripping question is for instance, if German road users are really that often responsible for road traffic accidents in the Netherlands and if they really present a danger to Dutch roads, so that we necessarily need that kind of cross-border enforcement of payments?

<u>Gössel</u>: Official EU documents state the main objective of the directive is to improve the road safety situation throughout the Union by reducing the impunity of non-resident road users. That the directive could possibly serve as a tool to improve the revenue situation in the Member States is not really mentioned in the documents.

<u>Brüggemann:</u> It goes without saying that the EU could not sell the directive as a tool to improve the revenue situation in the Member States. However, one is left with the suspicion that the directive was not exclusively meant to be an instrument for improving the road safety situation throughout the European Union. At this conjuncture, it is really

worth asking for how many fatal road traffic accidents German road users that infringed traffic rules can be held accountable in the Netherlands? Do you know anything about that?

Gössel: According to Antoinette Verhage, German road users accounted for about 14% of all the traffic offences that were committed in the former Dutch police region of Limburg-Noord between November 2007 and November 2008. Unfortunately, she does not say anything about how many German road users caused fatal road traffic accidents in Limburg-Noord during that time.

Brüggemann: I guess that the amount of German traffic offenders in some of the cities in Oost-Nederland is even higher during several occasions, as for instance when there is the weekly market in Enschede. However, there will also be other cities in Oost-Nederland, like Almelo, where German road users account for much less of the traffic offences. This is why the joint traffic control operations are conducted in regions that are close the Dutch/German border. I also think that there is a higher motivation for inhabitants of cities near the border to pay their fines. If they rely on crossing the borders regularly, due to professional purposes for instance, they can simply not afford to not pay the fines. But personally, I think that it is highly doubtful whether the cross-border directive facilitating the exchange of information on road safety related traffic offences really is the next step in Europe to improve the road safety situation.

<u>Gössel:</u> According to the European Commission, estimates indicate that nearly 500 lives could be saved every year due to the directive.

Brüggemann: If 500 lives were saved every year, this would be acceptable.

Gössel: You have to start to tackle the problem somewhere.

<u>Brüggemann:</u> That is absolutely true. Still, there are grounds for suspecting that the directive also is some kind of a rip-off instrument.

<u>Gössel</u>: Nevertheless, the directive is perceived as the right step in a good direction. The problem in the EU is that the Member States still enjoy a large degree of autonomy regarding road safety. Hitherto, the EU was not able to bring forward much binding legislation that could help to reduce the number of road traffic casualties.

Brüggemann: Regarding road safety, there are indeed mostly only non-binding white papers or recommendations at EU-level and there are huge differences in the road safety situations in the individual Member States. While some Member States managed to decrease their numbers of road traffic casualties, there remains much to be done in other Member States. This is sometimes also a question of the prioritization of problems. In a automotive nation such as Germany, the topic of road safety is high on the national agenda. Here, a wide array of actors tries to get a grip on road safety problems. There is for instance the police, the Federal Motor Vehicle and Transport Authority (KBA), the German Automobile Association (ADAC) or the Federal Highway Research Institute (BASt). The different actors involved in improving the road safety situation are of course always concerned with the questions of what has actually caused the decline of the number of road traffic casualties since the 1970s in Germany? Did the driving behavior change? Did it change due to police enforcement measures? Or is the decline in the number of road traffic casualties due to improvements in vehicle technology, like for instance the antilock braking system (ABS), airbags, electronic stability control (ESC) or electronic distance warning devices?

Whether a road user is slightly, heavily or fatally injured in a road traffic accidents often has something to do with luck- good or bad. How thick is the tree that the road user crashed into? What kind of car did the person drive? Was it a Fiat 500, or a Mercedes S-Class? How fast did the road user drive? How fast did the ambulance or the helicopter manage to reach the scene of the accident? All these are potential factors can make a difference between life and death. According to the German Road Traffic Act (StVO), people are considered road traffic accident fatalities if they die as a result of the accident within 30 days from the day of the accident. It may perhaps sound a bit arid from a police point of view, but I think that the qualitative improvement of the primary medical attention at the scene of the accident might have saved more lives than police enforcement did by improving driving behavior. The better the primary medical attention, the higher is the chance that the road user will live to see the 31st day after the accident and therefore will not be included in the road traffic fatalities statistics.

<u>Gössel:</u> Scientists that measure the effectiveness of traffic police enforcement solely on grounds of the reduction of the number of road traffic fatalities would be

satisfied with that. All the hospitalized road users that live to see the 31st day after the accident are officially not considered as road traffic fatalities; regardless of whether they die within 32 or 33 days from the day of the accident anyhow. For the concerned road user the consequences remained the same: They would still be dead. For the scientists however, they would constitute one less traffic fatality in the statistics.

Brüggemann: In 2012, 41 people lost their lives in traffic accidents in the Emsland region. In 2013, 29 people lost their lives here. A reduction of twelve fatalities from one year to another is in the first place quite a good result. After all, this would amount to a reduction of almost 30%. According to Destatis, the German national average was around 7-8% if I remember correctly. As I said, quite a good result at the very first glance. However, if I take a look at the number of heavily injured road users, things turn out differently. In 2012, there were 512 heavily injured road users in the Emsland region. In 2013, there were only four less heavily injured road users. If you then take once more in consideration that being killed or being heavily injured in a road traffic accident is some kind of a game of luck, then you really have to ask yourself if the road safety situation really changed in my jurisdiction. We registered around 10.000 road traffic accidents with 512 heavily injured road users and 41 fatalities in 2012. In 2013, a comparable amount of accidents was registered. There were indeed 12 fatalities less, but the number of heavily injured road users did almost not change at all. Thus, the safety level has in fact not substantially changed. However, if you only took a look at the number of road traffic fatalities, you would come to a different conclusion.

Appendix D

Interview with Hans Bijkerk/ Superintendent of the infrastructure division of the police force of Oost-Nederland/Netherlands: Conducted 25 May 2014

<u>Gössel:</u>What the objectives of the joint control operations of the police forces of Lower Saxony (GER) and Oost-Nederland (NL)?

Bijkerk: The objectives of the joint control operations of the police forces of Lower Saxony and Oost-Nederland are on the one hand to fight cross-border crime, and on the other hand to contribute to road safety. During our first e-mail contact, I saw that you already conducted an interview with my German colleague Karl-Heinz Brüggemann. Since the year 2005 we work closely together with our German colleagues in the realm of road safety. Back then, I used to talk a lot with Karl-Heinz Brüggemann about postdiscotheque accidents with several injured and killed young people in the cross-border region. For example, in the autumn of 2004, five young Dutch males were killed in a tragic road traffic accident near the Dutch city of Almelo²³. After having visited the German discotheque 'Index' in the German town of Schüttdorf they were on their way back home to the Netherlands. Presumably due to speeding, the car strayed from the road and crashed into a group of trees whereupon it caught fire. All five vehicle occupants died. In this way, there was a number of road traffic accidents in the crossborder region that gave reasons for concern. Consequently, the Dutch and the German police came to the conclusion that something needs to be done about this situation. A response to the road traffic accidents was the initiation of the so-called 'Guardian Angelprogram'. ²⁴Under this program, primarily young girls, aged 16-24 years, are appointed as guardian angels to appeal to young males' conscience at a party or in the discotheque. Young males, aged 18-24 years are the main group at risk to be involved in fatal postdiscotheque road traffic accidents. Their hormones play a central role for that. The guardian angels call upon these young males to refrain from driving under the influence

²³ (http://www.refdag.nl/nieuws/binnenland/vijf_doden_door_ongeval_bij_almelo_1_88512)

²⁴ (http://www.aktion-schutzengel.de)

of drugs or alcohol and to abstain from hazardous driving style on their way back home. In combination with the guardian angels' efforts to discourage other disco goers from driving under the influence of alcohol and drugs as well as hazardous driving styles, the Dutch and the German police conducted speed and alcohol control operations on both sides of the Dutch/German border. The controls were conducted on roads that young people use to travel to the discotheque and to depart from it later on. For the Dutch side of the border, this was mostly the case in the municipality of Tubbergen, close to the German community of Lage. Here, young Dutch people travel on rural roads towards the German discotheque 'Zak'. Also, the Dutch police conducted controls on the motorway A1, for young people that travel to the discotheque 'Aura' in the German town of Ibbenbüren or the discotheque 'Index' in the German town of Schüttdorf. With our controls we intended to cover a sufficiently broad period of time during weekend mornings. The control operations mostly began around 3 a.m.. In our experience, young disco goers arrive at the discotheque around 11:00 p.m. and depart from it around 3 a.m.. Elder disco goers arrive at the discotheque around 3:00 a.m. and leave again around 6:00 a.m.. After having visited a discotheque in Germany, many disco goers sleep in their cars for an hour or so before they start their journey back to the Netherlands. The police took these circumstances in consideration and coordinated the control activities accordingly.

<u>Gössel:</u> You talk about these control activities in the past tense. Do they not take place anymore?

<u>Bijkerk:</u> According to my information, the 'Guardian Angel-program' is still running in Germany. However, the police forces of Lower Saxony and Oost-Nederland have withdrawn from conducting systematic cross-border control activities that are related to this very program. Due to the fact, that some police officers who were responsible for the cross-border control activities related to the 'Guardian-Angel-program' either retired or nowadays perform other duties, the initiative has become dormant on the part of the police. In general, after the reorganization of the Dutch police force in 2013, the focus of the cross-border control activities with our German neighbors changed. There are barely any cross-border activities left that only focus on targeting road users who violate traffic rules. Nowadays, most of the cross-border control activities with our German

colleagues are a combination of fighting cross-border crime and of providing for road safety at the same time.

In this context, two cross-border control activities are particularly important. These are the so-called 'East-West Search' (Ost-West-Fahndung) and the 'Corridor Search' (Korridorfahndung). During the 'Corridor Search', which is conducted twice a year, police officers from the Netherlands and Germany are checking vehicles along the Dutch/German border, from Groningen to Aachen. During the 'East-West Search', which is conducted four times a year, police officers from Germany, the Netherlands and Poland are checking vehicles on the European route E30 from Amsterdam to Warsaw. During both operations, the fight against cross-border crime and aspects of road safety play a central role.

Additionally, there is a further cross-border police operation that deserves to be mentioned: The so-called 'Ochtendgloren' (Dawn)-Operation. The former Korps Landelijke Politiediensten (KLPD) and the regional police forces are responsible for the organization of this type of operation that is conducted twelve times a year.

This operation is not only conducted in the Dutch/German border region, but for instance also in the Dutch province of Gelderland. Based on the gut instincts of the involved police officers, vehicles are pulled over and checked from approximately 11:00 p.m. to 2:00 a.m.. As of 2:00 a.m., when roads are less busy, the police establishes stationary checkpoints where all the passing vehicles are pulled over and checked. The vehicles and the vehicle occupants are then not only checked by Dutch police officers, but also from Dutch customs authorities or German police officers. Martin Stallkamp from the police directorate Osnabrück is for instance quite frequently involved in 'Ochtengloren'-Operations. All in all, the 'Ochtendgloren'-Operation is quite diversified and can have different foci: Vehicles and their occupants are for instance checked for illegal weapons, stolen property and drugs. Besides targeting these aspects of cross-border crime, the 'Ochtendgloren'-Operations also target offending road users and can include alcohol checks and speed controls.

When talking about cross-border police cooperation between the police forces of Lower Saxony and Oost-Nederland, I would also like to mention the GPT, the permanently installed police team in Bad Bentheim. This team is composed of police officers from

Lower Saxony, North Rhine Westphalia, the German Federal Police, Oost-Nederland and the Marechaussee. Together, they perform all day-to-day policing responsibilities, including road safety issues. In the realm of road safety, the focus of the GPT is on apprehending road users that drive under the influence of alcohol and/or drugs and on road users that exceed the maximum permitted speed.

Gössel: What about the omission to wear seatbelts? You mentioned that during the 'Ochtendgloren'-Operations and during joint controls of the GPT the focus is on apprehending road users that drive under the influence of alcohol and/or drugs and on road users that violate speed limits. Are seatbelt laws not enforced during cross-border operations of the police forces of Lower Saxony and Oost-Nederland? Bijkerk: It is indeed true that the enforcement of seatbelt legislation only plays a minor role in the cross-border police cooperation endeavors of the two forces. There are for instance no concerted police operations that specifically target unbelted vehicle occupants. During cross-border control operations such as the 'East-West Search' or the 'Corridor Search', the main focus of the police concerning road safety is on targeting road users that operate their vehicles under the influence of drugs and/or alcohol and on road users that violate speed limits. This has something to do with the fact that seatbelt rates are already relatively high in our jurisdictions, at least as far as front seats are concerned. Here, additional safety gains through increased police enforcement are hard to achieve. Thus, while driving under the influence and inappropriate speed are still regarded as major risk factors on our roads and are therefore remain high on our agenda, the enforcement of seatbelt legislation is not a top priority anymore. That does however not indicate that the police officers turn a blind eye to violations of seatbelt legislation during cross-border operations. When vehicles are pulled over or stopped in a stationary checkpoint during control operations that actually target other offences, police officers always control for the general obligation to wear seatbelts. Once a violation of seatbelt legislation is detected, the police will of course issue a ticket to the person in question. The situation is somewhat different for everyday police work in Oost-Nederland and the other Dutch police regions. Here. the traffic enforcement teams (Verkeershandhavingsteams) of the police perform controls based on what is called 'HelmGras'. This acronym stands for helmet, seatbelt, red-light, alcohol and speed and stipulates the main focus of the traffic controls performed by the Dutch police. Thus, during our own control operations, we still regularly control for violations of seatbelt legislation.

Gössel: Together with the Dutch police, police forces of the two German Federal States of Lower Saxony and North Rhine Westphalia for the first time coordinated a highly intensified cross-border speed enforcement campaign in October 2012, the so-called 'Blitzmarathon'. According to information derived from a phone conversation with your colleague Hans Markerink from the National Police Agency (Landelijke Eenheid) it is not planned to participate in the 'Blitzmarathon' any longer. His explanation was that after the reorganization of the Dutch police, that came into effect on 1 January 2013, the Dutch police places more value on fighting crime when it comes to cross-border police cooperation with other countries.

<u>Bijkerk:</u> It is possible that the National Police Agency (Landelijke Eenheid) contemplates to not participate in the 'Blitzmarathon' any longer. However, the police unit of Oost-Nederland still participates in the cross-border 'Blitzmarathon'. I am responsible for the strategic orientation of the road safety activities of the police in the Twente region, which is part of the police unit of Oost-Nederland, and I can assure you that we are still involved in the implementation of the cross-border 'Blitzmarathon'. This means that if our German colleagues schedule the 'Blitzmarathon' in their jurisdictions, we also conduct intensified speed controls on our roads. As far as I am informed, citizens in Germany have a say where the police should conduct their speed controls. This is not the case for the police region of Oost-Nederland. Here, the police determines where speed controls are conducted. It is however possible that citizens approach a community police officer (wijkagent) to complain about an increased number of hazardous speed offences in their surroundings. We take the citizens' concerns seriously and it is conceivable that we will conduct speed controls in the area where the complaints are coming from. If our analysis in the aftermath of the speed control reveals that many drivers in fact exceeded the speed limit in that particular area, then we take into consideration to include that area in our future speed controls. Besides areas where citizens complain about road users that frequently exceed speed limits, we also conduct speed controls on accident-prone roads in our jurisdiction, so called blackspots. With our speed controls on roads where road traffic accidents have historically been concentrated, we intend to make an important contribution to deter road users from engaging in hazardous behaviors and therewith reduce the road toll.

Reducing the road toll is however something that cannot be achieved solely through increased traffic enforcement of the police.

<u>Gössel:</u> Scientific literature and policy documents tend to refer to the three Es in this context: Engineering, enforcement and education. It is often stated that only an interplay of these three components can achieve a sustainable reduction of the number of road traffic accidents.

<u>Bijkerk:</u> Absolutely. The point is that these three components cannot be separated; all three of them are important for the sake of contributing to road safety. That is why we as the police for instance give advice to the city of Enschede on where and how they should improve the road environment in order to reduce road safety risks. It falls into the remit of the city of Enschede to for instance put up speed tables or to construct speed humps as well as chicanes in order to permanently slow the speed of road users down. Installations like speed humps or chicanes force road users to adjust their speed twenty-four seven and therefore also contribute to road safety at times when the police does not conduct traffic controls. Thus, for sustainable road safety, the impact of engineering cannot be underestimated.

<u>Gössel:</u> Coming back to the 'Blitzmarathon'. Does conducting the 'Bitzmarathon' across-borders only mean that speed controls are performed at the same time in Lower Saxony, North Rhine-Westphalia and Oost-Nederland?

<u>Bijkerk:</u> It does first of all mean that speed controls are conducted by all three forces at the same time. Furthermore, it also means that these speed controls are closely coordinated. If our German colleagues in North Rhine-Westphalia for instance perform speed controls on the Federal Highway (Bundesstraße) B54, which becomes the Dutch National Highway (Rijksweg) N35 after the Dutch/German border, then the Dutch police also performs speed controls on the N35. The speed controls are coordinated insofar that if our German colleagues perform speed controls just short of the Dutch/German border, then the Dutch police does not perform speed controls right

across the border. The joint speed controls are hence managed in such a way that road users are provided with the opportunity to reflect on their inappropriate speed and to adapt their speed to the prevailing speed limit. By means of an intermission between the checkpoints, we basically grant the road user some kind of a moment of decision. When a certain road user exceeded the speed limit on the German side of the border and was detected by the German police, then the road user in question can make use of this moment of decision and adapt the speed to the prevailing speed limit. If the road user lets this opportunity pass without adapting the speed when crossing the border, then there is a good chance that the same obstinate road user will be caught speeding by the Dutch police as well. This would have the result that the road user in question will have to pay two speeding fines; one in Germany and one in the Netherlands.

While it is important to create a dense network of checkpoints in order to give as many road users as possible the impression that there is a good chance that they will be caught if they exceed the speed limit, it is also important to avoid that road users suspect the Dutch and German police forces for ripping them off mercilessly during cross-border speed controls like the 'Blitzmarathon'. In order to get the balance right, we closely coordinate our joint speed controls during the cross-border 'Blitzmarathon'.

The same of course also applies to the 'East-West Search' and the 'Corridor Search'. The coordination board for the 'Corridor Search' is located in Osnabrück. It is here, where we determine the locations of our joint controls. In close consultation with all the partners involved, care has to be taken that not too many checkpoints are concentrated in one place, whereas in other places no controls occur at all. Such an approach would simply not lead us anywhere.

<u>Gössel:</u> From what I have learned so far, there are besides the 'Blitzmarathon' barely any cross-border control operations that only focus on road safety. Most of them seem to be control operations that focus on both: Fighting crime and contributing to road safety. This is according to your German colleagues called the holistic approach. This holistic approach is however not without consequences for the road safety work of the police. If you take the 'Waakzaam Oost' (Vigilant East)

-Operation from 20.12.2013 as an example:²⁵ This control, which forms a part of the 'East-West Search' control series was conducted from late Thursday evening until early Friday morning. Statistics, however, seem to indicate that the occurrence of drink driving is more concentrated on weekend nights. For the police, this means that there was a higher chance of catching road users that operate their vehicle under the influence of alcohol if the controls were conducted on weekend nights. Are cross-border controls like the 'Corridor Search' or the 'East-West Search' always conducted on weekdays or are they also conducted at weekends?

<u>Bijkerk:</u> The 'Corridor Search' or the 'East-West Search' are most of the time not conducted at weekends.

<u>Gössel:</u> This means that certain aspects that could lead to an improvement of the road safety situation, are actually sacrificed for the sake of fighting cross-border crime.

<u>Bijkerk:</u> Well, the fact is that the control operations like the 'Corridor Search' and the 'East-West Search' are primarily intended to fight cross-border crime. The main priority of these operations is not placed on contributing to road safety. It is therefore possible that certain aspects that could make sense in the preventive road safety work are indeed sacrificed during control operations like the 'East-West Search' or the 'Corridor Search'. This is mainly a question of setting priorities. And as stated before: The main focus of these operations is on fighting cross-border crime.

In Oost-Nederland and the other Dutch police regions, the traffic enforcement teams (Verkeershandhavingsteams) certainly conduct their alcohol checks during weekend nights. The same is also true for the German police. When it comes to cross-border police cooperation, however, alcohol checks during weekend nights take place less frequently in recent times.

The Dutch police also increasingly conducts alcohol checks on Monday mornings in order to test road users for residual alcohol. Residual alcohol has increasingly proved a problem in the Netherlands. Many people simply underestimate this problem. As a rule

http://www.politie.nl/nieuws/2013/december/20/11-controle-waakzaam-oost.html, retrieved 15 September 2014

of thumb, you should not consume alcoholic beverages on a Sunday evening and take the wheel on a Monday morning.

<u>Gössel</u>: According to your German colleague Karl-Heinz Brüggemann, targets for traffic enforcement are often set locally. While the EU puts emphasis on fighting the 'three main killers' on European roads, the police often puts emphasis on local problems. According to Karl-Hein Brüggemann, collisions with trees are a major problem in the Emsland region. Around 30% of fatal accidents in the Emsland region are caused by collisions with trees.

Bijkerk: Collisions with trees do not constitute a major problem in Oost-Nederland. That seems to be a local problem in Lower Saxony or specifically in the Emsland region then. It is indeed the case that the EU puts a high emphasis on fighting speed, alcohol and the omission to wear seatbelts in order to reduce the number of casualties on roads throughout Europe. The EU's focus on these three longstanding problems becomes quite clear if one takes a look at the pan-European controls that are organized under the aegis of TISPOL. TISPOL, which is to a large extent financed by the European Commission, schedules six pan-European control campaigns each year that target drink-driving, excessive speed and the omission to wear seatbelts. In order to reach as many road users as possible on Europe's roads, TISPOL encourages all TISPOL member countries to participate in these one-week enforcement campaigns. The police force of Oost-Nederland participates in all six of these control campaigns. According to my information, the same is true for the all German police forces, including Lower Saxony.

<u>Gössel:</u> Whereas the enforcement of seatbelt legislation does not seem to play a major role in the cross-border cooperation endeavors of the police forces of Lower Saxony and Oost-Nederland, it is apparently still relevant for the pan-European TISPOL campaigns?

<u>Bijkerk:</u> Yes, it is indeed still relevant for TISPOL enforcement campaigns. There are still two pan-European enforcement campaigns scheduled for each year that specifically target road users' omission to wear seatbelts.

<u>Gössel:</u> According to your German colleague Karl-Heinz Brüggemann there is no concerted cross-border road safety concept between the police forces of Lower Saxony and Oost-Nederland that defines a common approach for the enforcement

of alcohol, speed, and to a lesser extent, seatbelt legislation. In his view, there is no agreement between the two forces that speed, alcohol and perhaps the omission to wear seatbelts are common problems that require a permanent common approach in order to improve the road safety situation in the cross-border region. Therefore, joint traffic controls that target the three risk factors are rather of an intermittent, selective, nature.

<u>Bijkerk:</u> Well, there was some kind of agreement that post-discotheque accidents like the one we talked about at the beginning of this interview were a common problem that called for a common response of the two forces. Back then, the common response was the implementation of the 'Guardian Angel-program' which was accompanied by intensified alcohol and speed checks in the cross-border region. But, as already stated earlier, these intensified checks are discontinued for various reasons.

The discontinuation of the intensified alcohol and speed controls related to the 'Guardian Angel-program' does not mean that post-discotheque accidents do not constitute a problem in the cross-border region anymore. However, there has been a change of approach in recent years on part of the police. The type of controls that are conducted by the two forces simply changed. The current controls mainly pursue a holistic approach and combine road safety work with fighting crime. With the exception of the 'Blitzmarathon', there are barely any large-scale cross-border control operations left that exclusively focus on the enforcement of speed, alcohol and perhaps seatbelt legislation.

The reorganization of the Dutch police, that came into effect on 1 January 2013, has not contributed to an improvement of the traffic police enforcement processes in the Netherlands. Due to the reorganization, the amount of work did certainly not decrease for the police officers. Too much is demanded of the officers and there are way too many duties that they have to perform. Sometimes, setting the right priorities is essential to effective policing; but road safety work does not always have the highest priority-that is unfortunately also true for the cross-border cooperation endeavors with our German colleagues.

All in all, there is indeed no concerted cross-border road safety concept between the two police forces. For the police, statistics underpin and influence how the police directs its

traffic enforcement processes. Statistics enable the police to understand problems, predict future risks and set the right priorities for the future accordingly. There are however no common statistical reports about road traffic accidents for Lower Saxony and Oost-Nederland. The Dutch Central Agency for Statistics (Het Centraal Bureau voor de Statistiek) ascertains the number of fatal traffic accidents and the number of seriously injured road users as well as the most frequent causes of accidents for Oost-Nederland, and a similar German institution will do the same for Lower Saxony. However, there are no common datasets for the two jurisdictions that could lead to the formulation of some kind of cross-border road safety concept. Therefore, each police force primarily directs its own traffic enforcement processes according to its own local problem analysis. The joint control operations between the two forces constitute some kind of additional benefit to the respective efforts of each of the two forces to improve the road safety situation in their jurisdiction. Since driving under the influence and speeding are two longstanding road safety problems in both jurisdictions, one inevitably comes to the conclusion that it makes sense to tackle these problems together, even if it is only occasionally.

<u>Gössel:</u> Even if the joint control operations of the police forces of Lower Saxony and Oost-Nederland are only of a selective, intermittent nature: Do you think that they make an important contribution to the road safety situation in the cross-border region? And if so, why is this the case?

<u>Bijkerk:</u> I am absolutely convinced that the joint control operations of the two forces make an important contribution to the road safety situation in the cross-border region, although it is certainly difficult to demonstrate that on a percentage basis or on a scale. The fact is, that many road users only obey traffic rules because they perceive a substantial risk of being detected and punished by the police if they don't. If road users perceived that no traffic controls are conducted at all in the cross-border region, then a great number of them would not obey traffic rules anymore.

Despite the fact that the two police forces make an important contribution to road safety by encouraging road users to obey traffic rules, the road safety situation in the crossborder region cannot be improved solely by means of control operations. We already talked about the three Es in this context. We need enforcement as much as we need education and engineering. At the end of the day it is difficult to say which of the three components saves more lives on the road. I guess it is the interplay of all three components that finally improves the road safety situation.

And of course one should not forget about the qualitative improvement of the primary medical attention at the scene of an accident. This also helped enormously to save the lives of many road users that were involved in traffic accidents in recent years.

While the number of road deaths declined in the Netherlands over the past years, the number of seriously injured road users is unfortunately increasing. This development causes great concern in the Netherlands. Regarding the number of road deaths, the Netherlands has one of the best road safety records, both in Europe and worldwide. The situation is somewhat different regarding the number of seriously injured road users. We urgently have to do something about this problem. In addition to the 600 road deaths that we have to mourn each year in the Netherlands, about 20,000 people are seriously injured on roads in the Netherlands; with increasing tendency. Therefore it should be our aim to further reduce the number of road deaths as well as to reduce the number of seriously injured road users-also with regard to the cross-border control operations with our colleagues from Lower Saxony.

Gössel: Ad Hellemons, a former director of TISPOL said during a personal conversation with me that while police cooperation in the EU moves ahead in most of it spheres of jurisdiction, road safety is often sidelined. If it is not about terrorism or organized crime, the EU Member States oftentimes tend to ignore the necessity for an intensified police cooperation across-borders, in his view. Nevertheless, the EU recommends in its policy orientations on road safety 2011-2020 that the principle of targeted control operations already organized in and between several Member States should be encouraged and generalized.

<u>Bijkerk:</u> Well, in fact cross-border police cooperation throughout the EU is not an easy matter. If you only take Germany and the Netherlands as an example: As you know, there are two fundamentally different legal systems prevailing in both countries. While the German police operates according to the legality principle, we apply the opportunity principle in the Netherlands. Sometimes, these two very different legal systems

complicate a frictionless police cooperation across borders; also in the realm of road safety work. Furthermore, in Germany, with its decentralized police system, there are huge differences in policing matters between the individual federal states. For the police force of Oost-Nederland it therefore also makes a difference whether we cooperate with the police force of Lower Saxony or with the police force of North-Rhine Westphalia. This state of affairs even further complicates our cross-border police cooperation endeavors with our German neighbors. The EU's claim for intensified police cooperation with increased joint control operations across borders is fair enough, but reality shows that such a claim is sometimes complicated by practical constraints in the realm of road safety.

<u>Gössel:</u> Reagrding the joint control operations that take place in the realm of road safety: What kind of measures are currently applied by the police force of Oost-Nederland to enforce speed, alcohol and seatbelt legislation?

Bijkerk: When it comes to the enforcement of alcohol legislation, I can tell you the following: Whether the police conducts alcohol checks in stationary checkpoints or pulls over vehicles out of the traffic flow: All drivers are required to participate in a breath alcohol test. In stark contrast to the situation in Germany, the police in the Netherlands does not need an initial suspicion of alcohol consumption in order to subject the driver to a breath alcohol test. What the police does can basically be described as unrestricted or random breath testing. The breath alcohol test device that the Dutch police currently applies is called Dräger Alcotest 9510. The Dräger Alcotest 9510 translates the measured breath alcohol concentration into the presumed alcohol concentration in a person's venous blood using a calibration factor. If the provided breath sample indicates that the person in question is driving a vehicle with a blood alcohol concentration in excess of the maximum permissible legal limit of 0.5 g/L, then the person is taken to the next police station. Here, a blood sample is taken in order to determine the person's blood alcohol concentration more accurately. The ascertained blood alcohol concentration is then used for a person's prosecution.

During control operations on German ground, German law is exclusively applicable, and vice versa, control operations on Dutch ground are governed by Dutch law. This provision is specified in the Treaty of Enschede, which entered into force on 1

September 2006. The Treaty of Enschede admittedly stipulates that Dutch police officers can under the guidance and in the presence of German police officers undertake sovereign tasks, but that these tasks have to be undertaken according to German law. This implies that Dutch police officers cannot perform random breaths tests as they are used to it from their domestic control operations if they assist their German colleagues, but that they have to have an initial suspicion of alcohol consumption in order to subject the driver to a breath alcohol test. If, vice versa, German police officers participate in control operations in the Netherlands under the guidance and in the presence of their Dutch colleagues, then Dutch law applies and the German police officers can perform random breath test.

<u>Gössel:</u> Ok, that is interesting. After having shed light on the enforcement of alcohol legislation, what about speed legislation? What kind of enforcement measures are applied here?

<u>Bijkerk:</u> The Dutch police in general, and thus also the police force of Oost-Nederland, applies two different mobile radar devices distributed from the ROBOT Nederland B.V. company. The so-called MultaRadar C device, is a device that is composed of a digital camera, a radar sensor and a flash unit. The speed of a vehicle is measured using a precise radar beam that operates according to the Doppler effect. The device emits a electromagnetic signal which is reflected by the passing vehicle. The vehicle's speed is then calculated as a result of the difference between the emitted and the received frequencies. For the case that a vehicle exceeds the speed limit, the digital camera automatically makes an evidence photo of the driver and the vehicle's number plate in order to be able to proof the offence. The flash unit makes it possible to perform measurements also at night or during bad visibility.

The device can either be mounted on a tripod or can be installed in a car and is able to monitor the approaching traffic on multiple traffic lanes at once. The MultaRadar C device can therefore be used to measure speeds on rural roads, in urban areas and on motorways. When the radar device is mounted on a tripod and placed next to the road, speed enforcement takes place in a overt manner- it is basically visible for all road users

that keep their eyes open. When the radar device is installed in a car, speed enforcement occurs in a hidden manner. The police in Oost-Nederland makes use of both variants.

Furthermore, the police in Oost-Nederland makes use of another mobile radar device, the so called Multanova 6F. The mode of operation is similar to the MultaRadar device. This device is likewise composed of a digital camera, a radar sensor and a flash unit. The Multanova 6F device can also be installed in a police car or alternatively be mounted on a tripod. The radar device is able to monitor approaching and receding traffic and is frequently deployed for speed controls on motorways.

In addition to the previously mentioned mobile radar devices, the police also makes use of the Ultralyte 100 LR laser gun, which is manufactured by Laser Technology INC., an American company. The Ultralyte laser gun can either be hand-held or it can be mounted on a tripod. When the laser gun is used during control operations, it is relatively easy for the road user to detect the police officer who performs the speed measurements. Police officers are often overtly standing on bridges, in roundabouts and at the roadside, or they are sitting in police cars on the side of the road. Police officers deploy the device to perform speed measurements on rural roads, on motorways or urban areas. In contrast to the mobile radar devices that automatically make a digital evidence photo of speeding offences, the Ultralyte laser gun is not able to produce such a photo. Thus, speeding road users are pursued and pulled over by colleagues of the police officers that perform the speed measurements. Subsequently, the identity of the offending road user is verified and the road user is informed about the committed offence. Afterwards, the infringement notification is sent out by mail to the person in question.

In other parts of the Netherlands the section speed control system (trajectcontrole) is deployed to raise the level of road safety. This system calculates the average speed of every single vehicle over a designated road section. On entry of the enforcement section, cameras take an image of every vehicle together with a time stamp. On leaving the enforcement section, the same is repeated. On the basis of the known distance between the two cameras and the time required by each vehicle to travel between them, the system calculates an average speed. When the average speed of a vehicle exceeds a defined level, the system provides all the necessary data to penalize the speed offender.

The section speed control system operates seven days a week, twenty-four hours a day and under all weather conditions. Therefore, the detection probability of speed offenders is nearly 100%- something that the police can hardly achieve with their speed enforcement measures.

In Oost-Nederland, however, the section speed control system is not applied.

Gössel: Why is this the case?

<u>Bijkerk:</u> Well, that is a good question. Perhaps, the National Prosecution Team Transport (Landelijk Parket Team Verkeer) of the Public Prosecution Service (Openbaar Ministerie) considers the implementation of such a section speed control system as not being worthwhile for the road network in the eastern parts of the Netherlands as the level of traffic as perceived as being too low. The operating section speed control systems can rather be found in the central and the western Netherlands; in the large conurbations with highly frequented roads. Section speed control system are for instance operated on the motorway A2, the motorway A4 and the motorway A12 between Utrecht and The Hague.

As I explained earlier, the enforcement of seatbelt legislation only plays a minor role in the cross-border police cooperation endeavors of the two forces. Seatbelt violations are therefore most of the time only detected if vehicles are stopped in stationary checkpoints that were actually established for control operations with a different focus; as some kind of bycatch in a way.

<u>Gössel</u>: If you had to assess the cooperation between the police forces of Lower Saxony and Oost-Nederland in the realm of road safety: How well do you think does this cooperation function across borders?

<u>Bijkerk:</u> All in all, I think that the cooperation between the two forces functions well. One key reason for that is that there is mutual trust between the two forces. Trust provides the basis for a good cooperation. If there is mutual trust, then there is also an opportunity to tackle certain problems concertedly. Personally, I cooperate with German colleagues across borders for quite some time. Thus, some really good contacts between me and some German police officers have come into existence. For the case that certain problems arise, I know exactly who to get in touch with in Lower Saxony. If you know

each other, then it is relatively easy to come together with the intention to find a common solution for common problems.