

„Vision Zero“ – Executive Summary

This article introduces "Vision Zero" as the global strategy for the prevention of fatal and severe road accidents and accidents at workplace. It is a translation of the paper "Schriftenreihe Verkehrssicherheit 16: Vision Zero – Grundlagen & Strategien", issued by German Road Safety Council (DVR). First, this article outlines the origins and how it came into being, thereafter, it focuses explicitly on the meaning and definition of Vision Zero. To this end, four principles of Vision Zero are explained: First: Life is not negotiable. Second: Human beings are fallible. Third: The tolerable limits are set by physical endurance of human beings – Fourth: Human beings have a right to a safe transport system and a safe working environment.

This is followed by an outlook until the year 2020 and a presentation of the priority measures that are necessary to implement the strategy, which are seat belt usage, alcohol ban, and appropriate speed.

A vision evolves

Although it is sometimes referred to as a philosophy or vision, "Vision Zero" is in fact a strategy. This strategy, for which we have been using the term of "Vision Zero" for a few decades now, originates from different continents and eras, but ultimately has its roots in the chemical industry.

The oldest known origin goes back to Éleuthère Irénée du Pont de Nemours (1771 - 1834), who is more generally known by the abbreviated form of his name, E.I. du Pont. In 1802, he acquired a property on Brandywine River near Wilmington/Delaware (U.S.A.) and established E. I. du Pont de Nemours and Company, a gunpowder mill, at what thus became the founding site of the DuPont group of companies. Even in its first years of operation, a number of severe occupational accidents occurred in connection with violent explosions at the plant. At one later point in time, as much as three wagonloads of gunpowder blew up right in the centre of Wilmington while being transported through the town. The accident left several people dead and destroyed numerous buildings.

In response to such severe occupational accidents, du Pont established the first safety rules as early as in 1811, placing the responsibility for safety within the company specifically on the management's shoulders. This went so far as to require managers to live with their families on-site on the company's premises. In this way, the management was to demonstrate its responsibility for the life and health of the company's employees, as well as its confidence in the level of labour safety achieved.

Every accident is preventable – this conviction proved to be a very powerful motivation and incentive for accident prevention. From these early days until today, it found its expression for instance in the principle that all accidents and also near-accidents need to be documented and analysed quickly and thoroughly. To this day, the DuPont group is considered the global leader in matters of employee safety and health. One key element of this DuPont safety
culture has been, and continues to be, the creation of an error-forgiving workplace environment, which has by now evolved into a key constituent of "Vision Zero" as well.

In Europe, ever more importance was attached to the "zero accident" concept in the 1990s when political strategies to promote road safety were developed. In Sweden, chemical industry risks were intensely debated in the wake of the Seveso and Bhopal disasters – to the point of considering, albeit briefly, a total ban on all chemical industry. And the Swedish Transport Ministry officially transferred the main principles of the zero accident philosophy to the field of road traffic safety. Thus, the Ministry became the first to employ the term of "Vision Zero" for this approach. "Vision Zero is a view of a future in which nobody, while participating in road traffic, is killed or sustains injuries resulting in lifelong impairment", the Swedish National Road Administration "Vägverket" emphasize in a publication. And this definition of Vision Zero has indeed remained valid to this day.

The shared responsibility of public traffic space, vehicles and road users is clearly described here for the first time, "Road traffic safety activity, within the meaning of Vision Zero, implies that roads and vehicles must be adapted more effectively to human preconditions, and that all those designing and using the road traffic system must share the responsibility for this safety".

Since 1997, when "Vision Zero" was passed into law by Swedish Parliament, it has been providing the basis of Swedish road traffic policy.

What does Vision Zero mean?

Vision Zero is based on four fundamental principles:

First: Life is not negotiable.
No other asset can be important enough to be offset against human life. Since 1953, the numbers of road accident victims in Germany are recorded by the Federal Statistical Office. Since then, a total of 732,151 persons died in road traffic accidents in Germany. This is much more than the population of Frankfurt-on-Main. The number of those killed in road accidents has reached a historically low level in 2010 with only 3657 fatalities. But still, on average ten people die every day on German roads.

For the sake of a mental experiment, let us transport E.I. du Pont from 1802 into the present, and let us further assume that the motor car had not yet been invented. Imagine that Mr. du Pont now informs politics, the media and the public in Germany that he, having perfected the manufacture of gunpowder, had devised an altogether new technology – individually steerable motor vehicles that would put our personal mobility on an entirely new footing. However, we would have to envisage - so he would add - that the launch of this technology would introduce a new accident type, namely traffic accidents, and these would cause about 10 fatalities per day in his estimate.

Clearly enough, this new technology would never be introduced, and the inventor's proposal would meet with rejection if not outrage. Who could bear the responsibility for a technology
causing 10 fatal accidents per day? Politics, society and the media would unanimously reject the idea.

The right to life and physical integrity is among the fundamental principles enshrined in the German Basic Law – and this is exactly what Vision Zero demands. Protecting this fundamental right is the obligation of the governmental bodies. Although no specific individual measure can be derived from this right, both the legislator and the executive are called upon to do everything to safeguard this constitutionally protected right. Given the manifold possibilities and the road traffic safety level already reached in neighbouring countries such as Sweden, it may well be questioned critically whether the right to life and physical integrity in Germany and many EU member states having constitutional provisions to that effect is indeed protected by all available means.

Second:

**Human beings are fallible**

Vision Zero is based on the empirical fact that errors in road traffic cannot be fully avoided, much like they cannot be entirely avoided at the workplace - and often enough, the road is the workplace. Evolutionarily, man is built to move at speeds not exceeding 20 to 30 kph. For thousands of years, this has been the range to which human locomotion has been confined. Throughout the millennia, people's motor functions and coordination have been oriented towards this maximum speed – and so have their perception and information processing functions. Scientific research on human sensorimotor functions has revealed how limited our capacities actually are when it comes to absorbing key data from our environment, processing them, and collating them with information already stored. It is evident that in the speed ranges in which we predominantly participate in motor vehicle traffic, human error tends to be the norm rather than the exception.

To this, one must add all the human errors caused by emotional, motivational or stress-related processes. It therefore comes as no surprise, at a first glance, that research into workplace and traffic accidents clearly shows human error to account for most of all accident causes. But this is also where wrong approaches come in: If humans – with their evolutionally developed motor functions, coordination, perception and information processing abilities – are typically unable to cope with today's road traffic situations without erring, then we cannot blame them for many of the errors made. To put it differently: Even if we exercise the very best of our knowledge and belief, the specific error rate at any given time is just a matter of probability. At high speeds and/or in complex traffic situations, this error rate will be high. Likewise and luckily enough, there is only a relatively low probability that an accident occurs. Conversely, this also means that in nearly every traffic accident and in many occupational accidents, we can expect human error to play a role at many points in the accident causation chain.

This being so, the crucial question is for which errors we can blame humans at all. Since our modern-day road traffic system is much too rarely adapted to the error-proneness of humans. Worldwide, across the EU and on a national scale in Germany, road users die every day because of mistakes made by themselves or others. Most often, these mistakes are committed thousands of times but remain without consequences in the majority of cases because of the low accident probability involved. However, in a specific constellation of environmental and road conditions or following a particular interaction with other road users, an error made thousands of times may suddenly result in death or severe injury.

"Errors must never carry a penalty of death", is therefore an important element of the Vision Zero concept.
Third:
**Tolerable limits are set by physical endurance of human beings**  
Especially if one assumes that people make mistakes, it must be ensured that the resulting accidents will not give rise to severe personal injury. "Nobody dies, everybody arrives" (Keiner kommt um, alle kommen an) is the formula adopted by the German Road Safety Council (DVR) when it resolved to make Vision Zero its strategy for action. The indicator and criterion for the design of a traffic system is the biological tolerance of human beings or, in somewhat more colloquial terms, how much a person can bear.

Accident research has yielded a number of evidence-based threshold values in this respect. Most people can survive a collision with a vehicle travelling no faster than 30 kph in case they are not inside the vehicle themselves. Additional optimization in vehicle design and, possibly, the use of exterior air bags will make it possible to increase this value further. At the present level of passive safety engineering, a passenger car provides adequate occupant protection in a head-on crash at up to about 70 kph; in a side impact, the critical speed is currently at approx. 50 kph. These values can still be raised by improvements in passive safety systems. Moreover, active safety features such as automatic emergence braking will increasingly make it possible to bring speeds down to below the critical level by the time the accident occurs.

However, these figures do not take into account individual differences. Older people, for instance, are more at risk, as their physical resistance is often lower and injuries will heal less readily. For children, too, different conditions apply in part since different motion sequences, depending on body height, will take place in the event of, e.g., a collision between a pedestrian and a passenger car.

Since we are unable, in view of the long evolutionary cycles we have completed, to increase human resilience within just a few decades, the conclusion is clear: The entire road transport system must be adapted to human needs, not vice versa. The aim is to prevent serious personal injury in accidents – which still need to be viewed as inevitable.

Fourth:
**Human beings have a right to a safe transport system**  
The citizens by themselves cannot create a safe transport system. It is the duty of State governments and companies to get involved in this task, or rather to shape it. However, this does not relieve the individual of his/her own responsibility. Quite the opposite is true: Each individual must be aware of the risks he or she produces for others through his/her own acts or omissions. In Sweden, this is referred to as "shared responsibility." The individual has the responsibility to observe laws and regulations, whereas the system designers must ensure that the system as a whole is safe. The system designers mainly include the public authorities in charge of building and maintaining the roads, the vehicle manufacturers and road transport companies engaged in the transport of goods or passengers, but also politicians, the legislative authorities, the judiciary, and the police.

This systematic view of Vision Zero probably constitutes the most important change from the view still widely prevalent today: In road traffic law, for instance, it is primarily the individual road user who is held liable - the responsibility of the system designer, on the other hand, is marginal at best. Claes Tingvall, Head of the Department of Traffic Safety in the Swedish National Road Administration, who is considered to be one of the fathers of Vision Zero, once explained the revised approach by drawing an interesting comparison: "As road traffic administrators we certainly never killed people with intent, but safety never was our
main concern. A few hundred years ago, it was accepted wisdom that people got ill because of their immoral way of living and their failure to live by God's will. When it comes to traffic accidents, we still come across pretty much the same attitude today: We have understood that we get sick because of bacteria and viruses. But when an accident occurs, we still blame the victims for their stupidity and irresponsibility."

**Vision Zero prevails**

After the turn of the millennium, the new Vision Zero approach was taken up in numerous other countries, so for instance in Denmark, Norway, Finland, Switzerland, the Netherlands, and Great Britain. Claes Tingvall of "Vägverket" presented the new approach at many international congresses and symposia. The DVR Board has participated in the discussion and set up a special working group to look into the adoption of Vision Zero for road safety activities in Germany. After intense debates, the DVR Board on 16 October 2007 decided to adopt Vision Zero as the basic principle for its road safety activities.

Concerns and objections against Vision Zero often originated in the question: Why don't we do business as usual? After all, we were successful! As an example, one might consider the current road traffic safety situation in Germany, which has improved quite indisputably. From 21,300 traffic deaths in 1970 to 3,657 in 2010, we have come a long and definitely successful way in these past 40 years, and many institutions and organizations have contributed greatly to this progress. On 26 June 1969, shortly before the number of road deaths had reached its highest level ever, the German Road Safety Council was founded at the suggestion of Federal Minister of Transport Georg Leber. And at its very beginning, it had already 93 members. The founding memorandum underlines that the existing measures were inadequate, and that there was a dire need to do something new to combat this appalling situation. Above all, however, the members jointly decided that for the first time, all organizations involved will combine their efforts within DVR and will strive to achieve common goals. The State authorities had clearly declared their willingness to help and to consider DVR as the platform for discussions among equals.

Although Germany's re-unification has made it a bigger country and road traffic has intensified vastly, the low figure of 3,657 traffic deaths and the present number of serious injuries are in no way acceptable, and neither is the damage to the national economy. According to data made available by the German Federal Highway Research Institute BASf, the cost of road traffic accidents (personal injuries and property damage) to the national economy amount to around 30 million Euros per year.

 Critics occasionally call Vision Zero unrealistic or accuse it of reflecting a one-sided ideological attitude. However, Vision Zero merely defines an objective and the associated strategy. It is not so much a quantitative target, but rather a qualitative one. And we all know the truism that in order to achieve the optimum, one must aspire to the seemingly impossible. Quantitative targets, such as a 50% reduction in accident fatalities within a decade, can only be set as a consequence of the strategy. Vision Zero explicitly does not aim, by its original definition nor by the DVR Board resolutions, to prevent all accidents. Its objective – to quote "Vägverket“, the Swedish National Road Administration, once again – is "the image of a future in which nobody, while participating in road traffic, is killed or sustains injuries resulting in lifelong impairment."
The critics of Vision Zero should be confronted, first and foremost, with the strategy's successful implementation in other transport modes. In both air and rail transport, Vision Zero has long been the gold standard and indeed, has very largely been achieved in these fields in Germany. But here again, our customarily disparate forms of thinking become evident: Who would still board an aircraft in Germany, for instance, if aircraft accidents caused 3,000 fatalities each year? Who would ever entrust his/her life to an airline quoting a number 'x' as their annual fatalities target – even if the number were in the low three-digit range. The same applies when boarding a train: It is taken socially for granted that train travel in Germany will cause neither death nor severe injuries. Accordingly, in the rare cases of severe railway accidents, the media outcry will be enormous and in-depth investigations will be carried out to ensure that such an accident can never re-occur. On the other hand, getting into a car or a bus, we waste no time thinking about the fact that we are putting our lives in the hands of a transport system which, even today, is responsible for over 3,600 fatalities and more than 60,000 severe injuries each year. We have simply gotten used to this.

An argument which cannot be so readily refuted, on the other hand, is that the implementation of Vision Zero will make mobility more expensive. However, this is true only at first glance. To be sure, safety cannot be had for free. But prevention does pay off – the effects of accidents are disproportionately more expensive. In Sweden it has been found that roads are less costly to build or rebuild after a Vision Zero audit, because more careful planning will be used – quite apart from the fact that a safer road will be obtained. If we consider the damage caused to the German economy by road traffic accidents each year – with the current figure being EUR 30 billion - we get a fairly clear idea of the financial savings potential which can be realized by investing in prevention in general and by consistently implementing Vision Zero in particular.

Vision Zero and Traffic Safety 2020

So it was a logical consequence to incorporate the Vision Zero also in the DVR key guideline paper "Road Safety 2020". Given the human suffering and immense economic costs that are involved with traffic accidents, traffic safety must be viewed in the social context – this is what the paper states as a consequence. The crucial issue here has to be the perspective of sustainability leading to the goal of creating a safe and efficient mobility that is acceptable both from a social and an ecological perspective. And to quote literally from the paper, "The transport system must be adapted to the people and not vice versa. All actors in the field of traffic safety are called upon to act accordingly."

Since late 2007, DVR has brought Vision Zero increasingly to public attention and promoted the new strategy. The positive response is really encouraging. So the Conference of Federal Ministers of Transport decided in October 2008 that "The Conference of Federal Ministers of Transport consider the Vision Zero approach an appropriate basis for a long-term qualitative goal of future road safety activities." Several Federal States have chosen Vision Zero to be the basis of their road safety activities and/or their transport policy. This is explicitly stated in the coalition agreements of North Rhine-Westphalia (2005), Brandenburg (2010) and Baden-Wuerttemberg (2011). And on the DVR General Assembly on 3rd December 2009 in Berlin, the Parliamentary State Secretary Dr. Andreas Scheuer (Federal Ministry of Transport, Building and Urban Development, BMVBS) said, "The positive trend of declining numbers in road traffic fatalities and injuries needs to continue. It is our goal that further progress be
achieved until reaching the goals set in Vision Zero. This is an ambitious and exemplary kind of work carried out by associations, and it is something that I can't but support." The EU Commission clearly committed itself to Vision Zero in its White Paper called "Roadmap to a Single European Transport Area — Towards a competitive and resource efficient transport system"

The recommendations issued by the Scientific Advisory Board to the Federal Minister of Transport, Building and Urban Affairs also embarked on Vision Zero. Their report was part of the preparatory activities that finally would feed into the Federal Government's Programme for Road Safety announced for 2011. The advisory board adopts a clear position here which is based on scientific studies in various disciplines. To quote literally from the report, "A future-oriented concept like Vision Zero which is compatible on an international scale, would create a consensual framework for road safety activities in the coming decade on a social level (...)." Such an objective implements the requirement for minimizing road traffic accidents in a way that is perceptible and verifiable by the general public at large. It creates an atmosphere in favour of road traffic safety and imparts the concept of shared responsibility for the safety of the transport system. An interim target that is attainable by consistently implementing the recommendations presented here is halving the number of road fatalities by 2020 — that is the view of the Scientific Advisory Board. "In 2020, therefore, the number of fatally injured road users should be less than 2,000 persons." Consequently, the recommendations issued by the Scientific Advisory Board are entitled, "Safety first - ways to improve road traffic safety in Germany" (Sicherheit zuerst – Möglichkeiten zur Erhöhung der Straßenverkehrssicherheit in Deutschland)

The German Social Accident Insurance (DGUV) has also taken a clear position by including Vision Zero in its prevention guidelines. As early as on 28 November 2008, the representatives of both the parties insured and employers in the General Assembly of the DGUV unanimously agreed on a position paper, the title of which is already the answer to the question of "why" - and the answer is: "Prevention Pays Off!" (Prävention lohnt sich!). This new position paper refers to the working environment and at the same time to the educational institutions. The introduction states clearly and unequivocally, "The working environment and the educational institutions must be designed in a way so as to prevent against workplace accidents, accidents involving schoolchildren, commuting accidents, occupational diseases and occupational health hazards by all appropriate means (Vision Zero)." This can safely be called a paradigm shift. The position paper continues, "The working environment and the educational institutions must be designed in a way that humane and health-promoting measures enable people to contribute their share to economic and social added value regardless of their individual characteristics." There is hardly any better way, which at the same time is easier to understand, of describing the statutory prevention mandate "by all appropriate means".

The Vision Zero of DGUV is both narrower and broader than that adopted by DVR. The DGUV statutory mandate obliges the members of this umbrella organisation to prevent against occupational accidents, commuting accidents and occupational diseases, which is a broader spectrum than solely road traffic. For the field of road traffic, DGUV and its members deal only with the commuting accidents occurring while travelling to and from work as well as road traffic accidents sustained by people whose workplace is on the road, such as taxi drivers, bus drivers, truck drivers and business travellers.
Future tasks

Which areas of action are particularly suitable for the implementation of Vision Zero, or hold the greatest potential? And then, what are the tasks for the social groups, where do they come in? With Vision Zero, two areas necessarily take on greater significance, and these are the areas of infrastructure - with particular reference given to roads - and of transportation, which means the vehicles. Information and motivation of people, and claiming that they bring in their share of responsibility, certainly must not be neglected. But still, through the implementation of Vision Zero, the use of non-utilized – technical – potentials applied for traffic infrastructure and transport modes is becoming particularly important.

The Vision Zero strategy requires that clear milestones be formulated. This, in turn, requires a comprehensive analysis of accidents, while taking into account the risk potential and placing at the same time particular emphasis on the high number of severe and critical injuries and of fatalities. Moreover, an action programme needs to be developed, in which the inputs by the various system designers will be mapped out. Safety needs to be understood as the key objective at all levels of action. And all this needs to be accompanied with an intense public debate.

The DVR key guideline paper "Road Safety 2020" enumerates a number of specific tasks and objectives that have been identified for the areas of vehicles, roads and road users. These measures have been adopted by consensus by more than 200 DVR members. Moreover, there are also a number of topics that are still under discussion among DVR members, but which the DVR Board considers to be necessarily included in the agenda in the near future, if Vision Zero is really meant seriously. In this context, a well-known issue will have to be re-considered from the Vision Zero perspective. And this is the question of the proper balance between freedom and regulation. This will be illustrated by three examples which will be portrayed subsequently. And this is because accident researchers in Europe speak of what they call the "three killers", which account for a vast number of road traffic accidents and a large proportion of fatal road traffic accidents and accidents with severe injuries. Therefore, implementing Vision Zero also implies fighting these three main accident causes.

100 percent seat belt use

The seat belt undoubtedly has to be regarded as the lifesaver number one in the field of passive safety. Volvo accident researchers start from the assumption that the seat belt reduces the number of fatal road accidents by 40 percent. The history of its introduction in Germany, however, also shows that it can be fatal to proceed with the introduction of legislation too slowly. Just to remind you: Since the late sixties, there were quite a number of political statements of will underlining the safety potential associated with the seat belt. In 1974, the legal requirement for providing passenger car front seats with seat belts became effective. Two more years passed until the mandatory seat belt use came into force, and it was only in 1984 that non-wearing of a seat belt became punishable by a fine. In the ten-year interim period, the seat belt wearing rate for the front seats increased from just under 40 percent to only about 60 percent, despite of numerous efforts made in awareness raising among adults, and public relations activities. It was only with the introduction of a fine for failure to wear seatbelts that the rate jumped to 92 percent on average for all roads. The number of killed and seriously injured occupants of passenger cars fell significantly as a result of this. Dr. Horst Heldmann, State Secretary the Federal Ministry of Transport, had a leading role in shaping this development while witnessing the political debates around the safety belts very closely. In a 1999 volume of the "Journal of Traffic Safety" (Zeitschrift für Verkehrssicherheit), his comments on the avoidable loss of time until a high seat belt wearing rate would be achieved
were as follows, "Rarely, except in war, wrong decisions caused so many victims that are so clearly countable as in this case. This is really a dark and painful chapter in German road safety policy."

Today, the seat belt wearing rate is highly gratifying. The Federal Highway Research Institute, through its regular surveys, registers a seat belt use of 99 percent on highways, 98 percent outside urban areas, and 97 percent inside urban areas. These figures refer to adult car occupants. 99 percent of the rear seat passengers travel seat-belted on motorways, and this is also true for 97 percent of the rear seat passengers outside urban areas. Inside urban areas, seat belt use on the rear seats drops, however, to 94 percent. Especially in the city, drivers and occupants occasionally renounce that protection, although as a result of the speeds driven there, seatbelts can guarantee mostly that rear seat occupants are not injured at all, or suffer only slight injuries. It is however alarming that a clearly above-average proportion among fatally injured vehicle occupants was not wearing seat belts.

The seat belt wearing rate in the commercial vehicle sector is much worse. While in light commercial vehicles up to 3.5 tonnes, 94 percent of drivers on average wear seatbelts on motorways and outside urban areas, the rate for large goods vehicles of over 3.5 tonnes is only 81 percent. And for the HGVs, the rate is only 79 percent. (All figures refer to 2010.)

This is true despite numerous studies have proven the high protective effect of seat belts particularly for drivers of heavy goods vehicles.

There are two approaches that can help to raise the seat belt wearing rate to reach the necessary 100 percent. First, the increased use of seatbelt reminder systems with optical and acoustic warning signals for the rear seats. And secondly, an increased density of controls, probably associated with higher sanctions. To use an analogy: Why does a violation of the regulations on particulate pollution which bans vehicles from entering an environmental zone without the appropriate sticker, carry a sanction of one demerit point in the Central Traffic Offenders Register, but a violation of the seat belt wearing regulation does not?

**Alcohol**

When it comes to drinking and driving, fortunately in recent years there has been a significant change in mood. Unlike before, driving under the influence of alcohol is no longer considered a trivial offence. There is significant support in the population that for driving a motor vehicle in road traffic, the clear and unequivocal "no alcohol" rule must apply. In a representative survey carried out on behalf of DVR, nearly 60 percent favoured a total ban on alcohol while driving, only 28.6 percent were against this rule.

Both legislation and the enforcement density significantly remain far behind that public opinion. At the same time, different threshold values exist in parallel which people consider absolutely confusing:

- First, there is the alcohol ban on novice drivers and persons aged under 21 years.
- Then, there is the 0.3 BAC limit as defined in the Penal Code (drink driving or dangerous driving),
- and the 0.5 BAC limit, an infringement of which will be punished as a misdemeanour,
- via the 1.1 BAC alcohol limit, which is considered as the beginning of the absolute unfitness to drive,
- until the 1.6 BAC limit for cyclists.
Hardly any motorist will be able to distinguish all these different values. For the purpose of Vision Zero, given the high numbers of fatalities and serious injuries, only the introduction of a clear and unequivocal ban on alcohol without any ifs and buts is the logical and consistent consequence.

After extensive discussions, the alcohol ban for novice drivers and those under 21 years passed into law only a few years ago. The development of accident numbers has shown that this measure was enormously effective. The number of alcohol-related accidents among young drivers dropped more significantly than among all road users as a whole. But still, in 2009, 22,000 road users in Germany were injured in alcohol-related accidents, and 440 were killed. Drinking and driving is one of the main causes of road traffic accidents. Why - one wonders – the rules of "No alcohol when driving" (Kein Alkohol beim Fahren) or "Either drink or drive" (Entweder trinken oder fahren)" should not apply to everyone? A clear regulation is necessary here to implement Vision Zero.

The Scientific Advisory Board of the Federal Ministry of Transport, Building and Urban Development particularly emphasizes in its recommendations that drinking and driving also appears as a problem of a sub-group of drivers, who do not succeed in managing a consistent separation of alcohol consumption and driving. The recommendations underline that in the transitional stage leading to alcohol addiction or alcohol misuse, corresponding habits associated with poor self-control result in a high risk of re-offending. The technical tools, with which it is possible to exclude re-offences after an alcohol-related conspicuous behaviour are available however. Car manufacturers have developed so-called alcolock systems that allow using the vehicle only after a breath alcohol testing. The Swedish manufacturer Volvo offers alclocks as a standard factory built-in device for series-production vehicles, both for passenger cars and commercial vehicles. In one in four trucks currently sold by Volvo, an Alcolock is already installed. In Sweden, employers are entitled to oblige their employees, through a clause in their employment contracts, to apply the ignition interlock device while driving company vehicles. In Finland and France, there are legal provisions which require these devices as mandatory in school buses. In Germany, the legal framework is not yet defined, although on the other hand, there is scientific evidence predominantly from the U.S. proving that dangerous drink-driving situations can be effectively prevented by using these devices.

Inappropriate Speed
For decades, excessive or inappropriate speed has been one of the main cause of accidents in Germany. Numerous campaigns have been dealing explicitly with this issue – one of the best known was the "Slow down!" campaign launched in 2008. The overwhelming response to this campaign, which by its confrontational style met with a lot of discussion in the beginning, and the huge number of awards the campaign received, speak for themselves. Inappropriate speed is a problem that can appear on all road types – in residential areas, outside urban areas and on motorways. 30 kph in purely residential areas has become a matter of course for us. 100 kph on rural roads was fiercely disputed when it was introduced in 1972 – it has long been accepted by road users. Today the additional safety thus gained seems too obvious as to put these rules into question. On motorways in Germany there is no general speed limit, but a "recommended speed" of 130 kph, the meaning of which is practically unknown. However, a large part of the motorway network is regulated by individual local speed limits, mostly in the range between 100 kph and 130 kph. When comparing, on a European scale, all traffic accidents on motorways per kilometres travelled, the motorways in Switzerland, the Netherlands and Denmark have shown to be particularly safe. Germany is ranked eighth in this comparison.
The Scientific Advisory Board at BMVBS concludes in its recommendations that it is precisely in the interest of cross-border traffic in Europe to have uniform speed controls.

In general, however, it is rather a question of bringing the actual speeds driven down to the stipulated speed limits, which primarily is feasible only through increased enforcement. An approach that is particularly suitable for this purpose, is applying increased enforcement activity associated with immediately stopping the driver, as well as section control, in which the speed is measured over a longer distance. When talking about inappropriate speed as a cause of accidents, it should also be noted that in Germany, where the control density is not quite high anyway, the fines imposed for speeding compared with the fines in Europe are very low and ranging at the lower end of the scale.

The State as the sovereign invalidates the rules set by itself when infringements are not adequately punished. Or is the right to bodily integrity a more valuable asset in other countries such as Scandinavia, as compared to Germany? According to estimates made by the European Transport Safety Council (ETSC), 50 percent of all accidents could be prevented, if motorists would simply comply with existing traffic laws.

Vision Zero sets the goal and is an incentive at the same time.