



B.

BestPoint
Criteria for BEST Practice Demerit POINT Systems

The BestPoint Handbook
Getting the best out of a Demerit Point System



BestPoint

Criteria for BEST Practice Demerit POINT Systems

Project Coordinator: Austrian Road Safety Board (KFV)

Partners of the project: BAST, CERTH, CDV, DTU, ETSC, IFSTTAR, ITS, KFV, MT, RSA, SWOV, VTT

Deliverable 3, August 2012

Authors: Ingrid van Schagen (SWOV) and Klaus Machata (KFV)

with contributions from Charles Goldenbeld (SWOV), Graziella Jost (ETSC),
Simone Klipp (BAST), Willem Vlakveld (SWOV) and Martin Winkelbauer (KFV)

www.bestpoint-project.eu



Co-funded by the European Commission

Project No. MOVE/SUB/2010/D3/300-1/S12.569987-BestPoint

Contents

Introducing the BestPoint Handbook	5
What is a Demerit Point System?	5
What is the BestPoint Handbook?	5
The contents: where to find what information?	6
I. Demerit Point Systems: overall features and facts	7
How does a DPS work?	7
Which EU Member States have a DPS in force?	7
The main mechanisms of a DPS	8
Communication and enforcement are indispensable	9
How effective is a DPS?	9
Does a DPS have undesirable side-effects?	10
How to make a DPS publically acceptable?	10
II. Offences and penalty points	12
What types of offences to include?	12
One point per offence or weighing points for severity?	13
How to deal with simultaneous multiple offences?	14
Adding or subtracting points?	14
What should the 'lifetime' of points be?	14
III. Road user groups	16
A different system for novice drivers?	16
Different treatment for professional drivers?	17
What about alcohol and drug offenders?	17
Including or excluding non-motorised road users?	18
How to treat "repeat recidivist" offenders?	18
IV . The role of enforcement and communication	20
Which methods to use?	20
Driver liability or owner liability?	21
What is a sufficiently high level of enforcement?	22
Communicating to increase the subjective level of enforcement	23
V. Applying intermediate and rehabilitation measures	25
What measures to take? A four-step approach	25
At what thresholds should measures be applied?	25
Which rehabilitation measures to take?	26
How to design driver improvement and rehabilitation courses?	27
VI. Organising, administering and monitoring DPS	29
How to make the DPS administration cost and time efficient?	29
How to make the system transparent for users?	30
Is it possible to prevent DPS-related fraud?	31
Why and how to monitor efficiency and effectiveness?	32
VII. Future perspectives: towards an EU-wide DPS?	33
VIII. Summary and conclusion	35

Foreword

Various kinds of Demerit Point Systems (DPS) have been developed and implemented in European countries, aimed at tackling repeat offences in road transport by acting as a deterrent and providing sanctioning. The impact of a DPS on the number of crashes is often reported to be significant but temporary. In this context the objective of the EU project BestPoint was to establish a set of recommended practices that would result in a more effective and sustainable contribution of DPS's to road safety.

This handbook provides a concise overview of these recommended practices and is the final result of the BestPoint project. It is based on evaluation studies, psychological and learning theories, expert experiences and considerations, and information about current practices as described in two extensive project Deliverables ^{1, 2}.

BestPoint was co-funded by DG MOVE of the European Commission. The duration of the project was 2 years, culminating in September 2012.

The project was coordinated by the Austrian Road Safety Board (KFV) in collaboration with 11 European research institutes and transport authorities: BAST (Germany), CDV (Czech Republic), CERTH (Greece), DTU (Denmark), ETSC (EU), IFSTTAR (France), ITS (Poland), Malta Transport Authority, RSA (Ireland), SWOV (The Netherlands), VTT (Finland).

More information about the project and its results can be found at:

<http://www.bestpoint-project.eu>

¹ Klipp S. et al. (2011) European Demerit Point Systems: Overview of their main features and expert opinions. BestPoint Deliverable 1. BAST, Bergisch Gladbach, Germany

² Goldenbeld, Ch. Van Schagen, I. & Vlakveld, W. (Eds; 2012) Identification of the essential features for an effective Demerit Point System. BestPoint Deliverable 2. SWOV, Leidschendam, Netherlands

What is a Demerit Point System?

It is unlikely that, in a lifetime, a road user will never break a traffic rule. If detected by the police, the result will be a warning, or more likely, a fine or penalty. In general, the more severe the violation, the higher the resulting fine. Very severe offences may result in a licence suspension, licence withdrawal or even imprisonment. The chance of being caught by the police and being punished is meant to prevent road users from offending by acting as a deterrent. This is the overall rationale behind police enforcement of traffic rules.

Currently, complementary to traditional police enforcement, many EU Member States have implemented some type of Demerit Point System (DPS). Such systems assign a number of points in relation to certain traffic offences. A DPS particularly addresses drivers who repeatedly commit offences, and its main aim is to stop them reoffending by holding out the prospect of additional punishment when a number of offences are committed and a defined number of penalty points collected.

A Demerit Point System:

- ▶ Is complementary to traditional police enforcement.
- ▶ Focuses on repeat offenders.
- ▶ Assigns (or detracts) 'penalty' points to offenders.
- ▶ Results in additional punishment when the level of repeat offending has resulted in a certain number of penalty points being collected or lost.

What is the BestPoint Handbook?

Aims and scope

The BestPoint Handbook presents in a concise way recommended practices for designing and implementing a Demerit Point System to ensure the largest possible safety benefit. Aspects that are presented include:

- Basic design characteristics, e.g. offences to be included, points to be assigned, road user groups to be distinguished, as well as determining thresholds for intermediate measures and consequences when reaching the maximum number of points.
- Accompanying measures, like warning letters, driver improvement courses, general information and communications, and enforcement.
- Measures to regain a licence, e.g. driving test, medical and psychological tests, and rehabilitation courses.
- Administrative and organisational issues.

The target audience

The Handbook is aimed primarily at Member State authorities who are in the process of setting up, reviewing or modifying a DPS, as well as their advisors and consultants. The Handbook also targets decision makers, and their advisors and consultants, at the European level, who are interested in taking the idea further towards cross-border exchange of information about offences as one of the steps towards an EU-wide DPS.

Sources of information

The recommendations in this Handbook are based on different sources of information. Whenever possible, scientific evaluation studies have been utilised to inform the recommendations. However, there is limited availability of studies which compare the effectiveness of specific elements of a DPS; In practice it proves to be methodologically difficult to single out DPS effects from those of accompanying factors and phenomena, such as levels of publicity and enforcement, and public apprehension. Therefore, in addition, the recommendations have also been based on general principles from psychological and learning theories. Moreover, experiences and opinions of national experts were used as a source of qualitative information about current practices and the practical pros and cons of different forms of a DPS. An extensive overview of the information sources utilised in the BestPoint project and justification of their use is available in two background publications, downloadable from: <http://www.bestpoint-project.eu/>

The BestPoint Handbook:

- ▶ Provides recommended practices for realising a maximally effective Demerit Points System.
- ▶ Provides a book of reference for designing or modifying a Demerit Point System in Member States.
- ▶ Serves as a framework at EU level for encouraging exchange of information about offences and/or points between Member States.
- ▶ Is based on scientific evaluation studies, principles from psychological and learning theories, and experiences from national experts.

The contents: where to find what information?

The next chapter of this BestPoint Handbook discusses the overall features of a Demerit Point System: how does it work? which countries have a DPS in place? what are the working mechanisms? what do we know about its effectiveness, etc.?

Subsequently, there are seven chapters, elaborating on the various sub-elements of a Demerit Point System. In each of these chapters the central question is “How to get the best out of a DPS”:

- I. Demerit Point Systems: overall features and facts
- II. Offences and penalty points
- III. Road user groups
- IV. The role of enforcement and communications
- V. Applying intermediate and rehabilitation measures
- VI. Organising, administering and monitoring a DPS
- VII. Future perspectives: towards an EU DPS?

Finally, chapter VIII summarises those features and elements that can be considered to be essential for an effective and manageable DPS.

I. Demerit Point Systems: overall features and facts

How does a DPS work?

When looking at the details, no two Demerit Point Systems are identical. However, a number of common elements or characteristics can be identified which typify a 'standard' DPS.

A 'standard' DPS

A standard DPS includes a number of specified offences and each offence leads to a fixed number of penalty points; the more severe the offence, the more points. When committing an offence specified in the DPS, the driver receives the corresponding number of points. For the next offence, the driver gets additional points. A critical threshold or number of points is also set at which further action will be taken. If, within a specific time period, generally a few years, drivers reach the critical threshold, they lose their driving licence. If drivers are free of offences for a particular period, points gradually disappear. If drivers approach the critical threshold, they get the opportunity to attend a driver improvement course. In case of licence withdrawal, drivers will regain their licence after a particular period. In some countries drivers first have to complete a rehabilitation course or to take a new driving test. The penalty points assigned for an offence are on top of, and do not replace, the traditional fines or other penalties.

A lot of variation

While the above describes common characteristics of a 'standard' DPS, a lot of variation exists. Some countries, rather than adding points, subtract points from an original credit. Some countries require a new driving test to be taken after licence withdrawal, others impose medical and psychological tests. Some countries do not apply driver improvement or rehabilitation courses. Some countries apply a DPS for all car drivers, some just for novice drivers or professional drivers. Furthermore there is also significant variation in the offences included in a DPS, their value in terms of penalty points, the amount of points needed to reach the threshold for further action and the possibilities and requirements for getting rid of points.

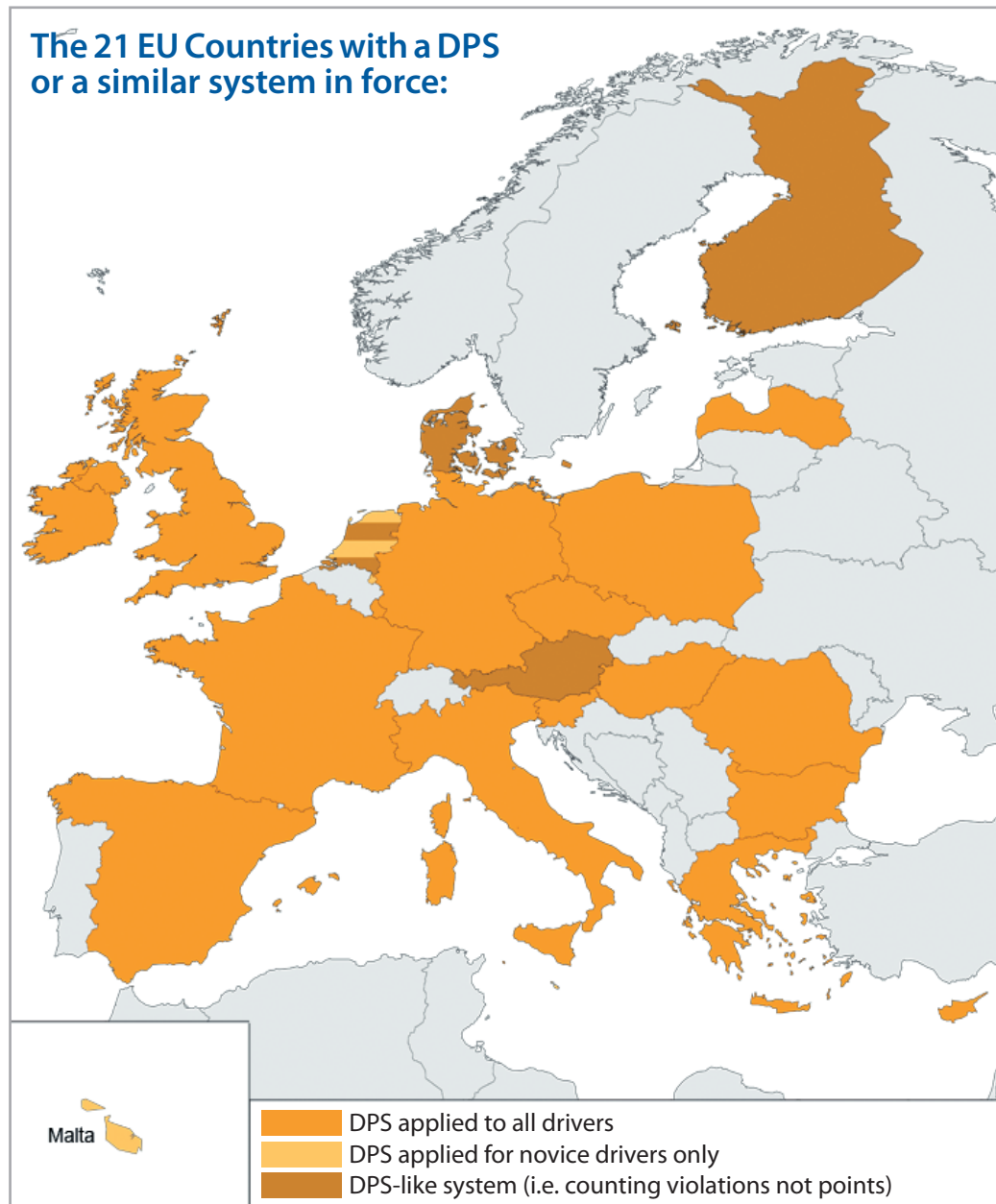
The general characteristics of a Demerit Point System are:

- ▶ An offence leads to a number of points; the more serious the offence, the more points;
- ▶ If within a certain time period, a defined number of points have been collected the licence is withdrawn;
- ▶ After the withdrawal period the licence will be regained, either or not after having completed a rehabilitation course or having taken a new driving test.

Which EU Member States have a DPS in force?

Currently, 21 out of the 27 EU Member States have some kind of a DPS in force. Most have a DPS that is applied to all drivers. Exceptions are Malta and the Netherlands that only have a DPS for novice drivers. Furthermore, Austria, Denmark, Finland and the Netherlands do not assign points to offences, but rather count the number of offences. Formally, this type of approach is not a point system, but since the other features are very similar, they are regarded as a DPS for the purposes of this handbook.

The 21 EU Countries with a DPS or a similar system in force:



The main mechanisms of a DPS

The main mechanisms that make a Demerit Point System work are prevention, selection and correction ³.

Prevention

A DPS is meant to prevent drivers from reoffending by holding out the prospect of additional punishment when committing several offences, and consequently, collecting a defined number of penalty points within a particular time span.

Selection

If the prevention mechanism has failed and drivers reoffend to the point where they exceed the critical threshold of points, then additional punishment is applied normally consisting of a ban from driving. As such the DPS selects the persistent offenders and excludes/suspends them, at least temporarily, from driving.

³ SWOV, 2010. Demerit Points Systems. Factsheet. Institute for Road Safety Research. Leidschendam, The Netherlands.

Correction

In order to regain a driving licence, suspended drivers usually have to attend a rehabilitation course and retake their driving test. These are corrective actions to teach and convince those involved to become safer drivers.

Communication and enforcement are indispensable

Both communication and enforcement are indispensable in order for a DPS to be successful and have a preventive effect. First communication: people must be aware that there is a DPS in place and understand how it works. Second enforcement: people must consider that there is sufficiently high a possibility of being detected by the police if they commit a road traffic offence. In this regard public knowledge should not be underestimated, for example, even if the authorities announce an increase in police enforcement, the general public will know if this is not acted upon and if the vast majority of offences remain undetected. Although it appears obvious that there has to be complete synergy between a DPS, police enforcement and communication, in practice, this is not always the case.

How effective is a DPS?

DPS: initial but temporary effects

Countries implementing a DPS generally monitor the number of casualties or number of offences, in order to assess the effectiveness of the DPS. Most of these studies report a positive effect of DPS's (and the related publicity and enforcement), but only for a limited time period. A meta-analysis⁴ showed that the strong initial positive impact – 15 to 20% reductions in crashes, fatalities and injuries – seems to wear off in under eighteen months and that “this limited effectiveness is related to the absence of complementary enforcement...”. The initial fear instilled by the possibility that drivers could ‘lose their licence after just a few offences’ seems to gradually fade away when the DPS disappears from the news, when friends and family stop talking about it, and when police visibility is low.

Some examples of initial DPS effects⁵

Crash reductions in the first year after the introduction of a DPS were reported to be 1.4% in Ireland (2002), 3.2% in Italy (2003), 14% in Denmark (2005) and 7.6% in Spain (2006), compared to the year previous to the introduction. In France, in the year after introduction (1992), the number of fatalities was 7% less than in the previous year.

In general, the decrease in the number of crashes is substantial in the first months after the introduction, but following this the number of crashes increases back to levels prior to introduction.

Scientifically sound evaluations hardly possible in practice

It should also be noted that it is very difficult, in practice probably impossible, to evaluate the effects of a DPS in a scientifically sound way. First, the introduction of a DPS generally goes together with a lot of media coverage, and with increased (or at least the threat of) enforcement.

⁴ Castillo-Manzano, J.I. & Castro-Nunõ, M. (2012). Driving licenses based on points systems: Efficient road safety strategy or latest fashion in global transport policy? A worldwide meta-analysis. *Transport Policy*, 21, 191-201.

⁵ SWOV, 2010. Demerit Points Systems. Factsheet. Institute for Road Safety Research. Leidschendam, The Netherlands

Sometimes, it also goes together with new rules and regulations. In addition, since a DPS is always introduced on a country-wide basis, it is impossible to include a good reference group. As a consequence, it will remain largely unknown whether observed changes in behaviour or in number of casualties are the result of the DPS or whether part or all of such changes must be attributed to the enforcement, the publicity, or other unknown factors.

Does a DPS have undesirable side-effects?

A DPS has potentially two undesirable side-effects: unlicensed driving and point trafficking. Both happen and must be taken seriously, identified and punished. Hard data about the prevalence and consequences of such activities are lacking.

Unlicensed driving

If individuals lose their driving licence because they have reached the critical threshold, there is always the possibility that they continue to drive. Unlicensed driving is a serious problem. For example, it has been estimated that up to 30% of the drivers sentenced for alcohol violations continue driving after they lost their licence. Unlicensed drivers are found to have a somewhat higher crash risk than licensed drivers. In addition, in order to avoid getting caught, unlicensed drivers may be more inclined to 'hit-and-run'. Unlicensed driving is not just a problem related to a DPS; it is an undesirable side-effect of any punishment that results in licence withdrawal.

Points trafficking

Directly related to a DPS is the phenomenon of points trafficking by which collected points are transferred from the individual that commits the offence to another individual (typically someone with no or only a few points). Points trafficking may occur in countries where the DPS includes the automatic detection of violations by number plate registration only. In these countries a vehicle owner caught by a camera might ask a family member or a friend to pretend they were driving. Points can also be sold for money via the Internet. Obviously, this type of false testimony is illegal and punishable, but it is generally difficult to prove. It is difficult to quantify the scale of the phenomenon, as there are obviously no data about the prevalence of points trafficking.

How to make a DPS publically acceptable?

It should not be too difficult to get the support of the general public for the introduction of a Demerit Point System. Most people already have positive perceptions about such systems. They consider a DPS to be a very fair system: drivers who regularly misbehave should be punished more severely than drivers who occasionally and accidentally commit a minor offence.

Once the DPS is in force, the support of the public must be maintained. For this, regular feedback about the overall functioning of the system is important. Regular feedback is also a means of communication useful to remind people of the existence and the value of the system and as such contributing to maintain its effect.

For individual drivers transparency of the system is important: a straightforward system with clear information about the consequences of an offence and in case of having collected or lost points. In addition, there must be easy access to up-to-date information about the individual point status (see also Chapter VI on Organisation and Administration).

In short: Overall features and facts

- ▶ 21 of the 27 EU Member States have installed some sort of a Demerit Point System.
- ▶ The purpose is the same: acting as a deterrent and providing sanctioning of offenders (through prevention, correction and selection), but the design and specifications largely vary.
- ▶ The initial effects are generally positive, but tend to wear off after a limited time period.
- ▶ Accompanying factors such as enforcement and communication are deemed essential for maintaining effectiveness.
- ▶ Unlicensed driving and points trafficking are undesirable side-effects of a DPS; the exact size of the problem is unknown.
- ▶ A majority of road users consider that a DPS is a good and fair approach to improving road safety.

II. Offences and penalty points

The overall idea of a Demerit Point System is that points are assigned to a driver when he or she commits an offence. When, within a given period, this driver has collected a particular number of points, further actions are taken, generally starting with a warning letter, participation in a driver improvement course, and finally licence withdrawal.

In developing a DPS, several important decisions must be made from the outset:

- Which types of offences to include?
- How many points to assign for each offence?
- How to deal with simultaneous multiple offences?
- Adding points towards a threshold or deducting points from an original credit of points?
- What should be the 'lifetime' of points?

What types of offences to include?

Currently, the number and type of offences included in DPS's varies widely between countries. This ranges from the inclusion of 13 offences in Austria to almost 1,300 offences in Germany.

Among the most common DPS offences are speeding, red light running, violation of priority rules, not using a seatbelt, dangerous overtaking and illegal use of mobile phones. Austria is the only country which does not include speeding offences in its DPS.

Offences and the number of countries having included them

Offence	Number of Countries	Offence	Number of Countries
Speeding	20	Pedestrian crossing	11
Red light running	17	Time headway	11
Priority rules	17	Vehicle license offences	11
Post-accident misbehaviour (e.g. hit and run)	16	Railway crossing	10
Trajectory violation (e.g. turning when forbidden)	15	Cargo securing	9
Alcohol	14	Wrong way driving	9
Overtaking	14	Helmet wearing	8
Dangerous behaviour	13	Parking	8
Seat belt	13	Vehicle lights	7
Driving license offences	12	Child restraint	7
Technical condition of vehicle	12	Endangering passengers	5
Cell phone use	12	Formal (such as driving without insurance)	4
Drugs	12	Driving time and rest periods (HGV)	2
Causing accident	11		

Recommended practice

Since the aim of a DPS is to improve safety, it seems reasonable to include those offences that have a straightforward relationship with crashes or crash severity. When deciding on the of-

fences to include, a balance should be found between defining a list that is comprehensive in terms of risk factors and the complexity of administration (see Chapter VI on Organisation and Administration).

It is recommended that, as a minimum, a DPS list of offences should include the following:

1. **Speeding** (exceeding the legal speed limit)
2. Driving under the influence of **alcohol** and/or **drugs**
3. Violation of rules on **seatbelt** wearing, **helmet** wearing (powered two-wheelers), and proper use of **child restraints**
4. **Red light** running
5. Violation of **priority** rules
6. Dangerous **overtaking**
7. Violating rules on minimum **headway** between vehicles
8. Endangering pedestrians at **zebra crossings**
9. Illegal use of **mobile phones** or other communication devices
10. Disobeying rules for road users at **railway level crossings**
11. **Wrong way driving** (on dual carriageway roads) and use of **forbidden lanes**
12. **Hit and run** – and other dangerous post-accident misbehaviour

Another set of offences may be considered specifically for professional drivers in the areas of securing loads or cargo, driving and resting times, and the technical condition of a vehicle (see the next chapter on Road User Groups).

Additional offences may also be considered where there is a particular road safety problem within a country (such as a high rate of vehicles in a poor technical condition). Member States may also include offences such as driving without a valid insurance or licence.

One point per offence or weighing points for severity?

The majority of countries have a DPS that assigns different numbers of points for different offences. Only four countries (Austria, Denmark, Finland and the Netherlands) assign one point for each offence included in their DPS – with three offences leading to licence suspension. For other countries with a DPS the common approach is to assign between 1 and 6 (for some countries 12 and above) points, depending on the severity of the offence. The licence withdrawal level for most countries ranges between 12 and 18 points. The highest point limit (39) has been set in Bulgaria.

Recommended practice

There is common understanding among experts that it is reasonable to link the number of points for an offence to its relevance for causing crashes and/or injuries. For certain kinds of offences – such as speeding or drink driving – it is recommendable to link the number of points to the levels of severity of the offence, i.e. the amount or degree by which the speed limit or the BAC level has been exceeded. It seems obvious that such a regime will help increase the credibility of a DPS and emphasise its function as a crash and injury prevention measure rather than a money-generating measure.

Wherever possible, the issuing of points should also be based on automated enforcement and not require the assessment of an administrator or judge (see also Chapter IV on Enforcement).

There are however frequent concerns in relation to the complexity and manageability of DPS's.

Germany revised its system in 2012 and moved from assigning between 1 and 7 points for an offence depending on severity to a simplified approach of issuing just one or two points for an offence (yet again, depending on severity). The lifetime of points (see section on lifetime hereunder), however, will be longer in the new German system for severe offences.

How to deal with simultaneous multiple offences?

The national approaches to dealing with multiple simultaneous offences vary considerably amongst countries. However, three typical patterns can be distinguished:

- Only counting the most severe offence (currently 7 countries).
- Adding up points for all offences (currently 5 countries).
- Adding up points for all offences but up to a fixed maximum (currently 5 countries).

Currently, only a small minority of countries have a DPS system under which it is possible to acquire enough points with a set of simultaneous offences (e.g. excessive speed + running a red light + failing to wear a seatbelt) to be disqualified from driving on the spot.

Recommended practice

In order both to ensure public acceptability of a DPS and avoid extraordinary hardship, introducing an additional offence “multiple offence” in a DPS could be considered, with an amount of points that is added to the most severe of the multiple offence but never reaches the withdrawal threshold in one go.

Adding or subtracting points?

In most of countries drivers start off with a point account of zero and points are added for an offence. In another five countries, Bulgaria, France, Italy, Luxembourg and Spain, drivers begin with a credit of points – and points are subtracted.

Recommended practice

There is no clear evidence whether the counting mode has an impact on the effectiveness of the system. However, there are indications from psychological decision making theory⁶ that due to the principle of “loss aversion” people are more inclined to prevent ‘losses’ than to prevent ‘gains’. Therefore, it could be argued that a system where points are subtracted when an offence is committed would be more effective. Nevertheless, it appears that this question is not significantly important in terms of influencing how well the DPS system works overall. What is critical is that the basic functions and the counting mechanisms of the system are clearly explained and communicated.

What should the ‘lifetime’ of points be?

The lifetime of points currently ranges across the EU from 6 months to 5 years, i.e. after a specific time – which sometimes depends on whether further offences have been committed in the meantime – all points related to one specific offence are deleted at once. Seven countries apply a fixed lifetime of points and in eight countries the lifetime of points is extended if other offences are committed. In five countries the lifetime of points varies depending on the severity of offences.

⁶ Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.

Recommended practice

According to expert opinion the typical lifetime of a point should never be less than one year. This has to do with the generally small chance of getting caught by the police when committing an offence.

Furthermore, it is recommended to adjust the lifetime of points depending on the severity and/or frequency of offences: Points for more severe or more frequent offences should have a longer lifetime. This will add yet another preventive element to the DPS. It must be noted, however, that this makes the system more complex to explain and to administer thereby presenting a risk to both its manageability and transparency.

Alternatively, a system of periodic remission of points might be considered. In such a system, each year the same predefined number of points would be subtracted, possibly on the condition that no new offences were registered. This way, assuming a DPS that weighs severity of the offence, (remaining) points from severe offences would automatically prevail for a longer period (4-point offences 'survive' longer than 2-point offences) and hence no particular rules were needed on lifetime of points for different offences.

In summary: Offences and points

- ▶ A DPS should include only offences that have a straightforward relationship with crashes or crash severity.
- ▶ It is recommended to link the number of points for an offence to its relevance for causing crashes and/or injuries.
- ▶ The typical lifetime of a point should not be less than one year.
- ▶ Linking the lifetime of points to the severity and frequency of offences should be considered as another preventive element.
- ▶ For simultaneous multiple offences a fixed amount of points could be added to the number of points assigned for the most severe offence, but in such a way that the licence withdrawal threshold is never reached in one go.

III. Road user groups

Most countries apply their DPS in the same way to all drivers and riders of motorised vehicles, and exclude non-motorised road users. However, there are various arguments that support the development of a more differentiated system. Groups that come to mind when considering a differentiated system are:

- Novice drivers
- Professional drivers
- Alcohol/drugs offenders
- Non-motorised offenders with and without a driving licence
- 'Repeat recidivist' offenders

The consequences for different target groups can be designed in different ways:

- A DPS may be exclusively applied to one or two target groups.
- A target group may be assigned more or less points for particular offences.
- Different thresholds for disqualification and intermediate measures may be applied for a target group.
- Additional measures may be imposed for a target group.

A different system for novice drivers?

Currently, out of the 21 EU Member States with a DPS, Malta and the Netherlands operate a DPS exclusively for novice drivers. In the case of Malta this applies for the three years during which a probationary licence is held, while in the Netherlands it applies for the first five years.

Of the 19 countries with a DPS for all licence holders 8 apply different levels with regard to disqualification of novice drivers:

- Denmark disqualifies after two instead of three offences within three years.
- Finland disqualifies after two instead of three offences within one year or three instead of four offences within two years.
- Bulgaria disqualifies at 27 instead of 39 points, France and Great Britain at 6 instead of 12, Spain at 8 instead of 12 points, Latvia at 10 instead of 16 points, and Poland at 20 instead of 24 points.
- France requires novice drivers to attend driver improvement courses whereas for other drivers this is offered as a voluntary option to regain points.

Recommended practice

Both scientific evidence and expert opinions indicate that it is recommendable to apply special conditions for novice drivers, e.g. by lowering thresholds for intermediate measures and disqualification. Novice drivers (i.e. mostly young drivers) are in many ways different from the average driver: the phenomenon of juvenile risk is a mixture of over-confidence and showing-off in the presence of peers in combination with a lack of experience.

There is no need to include additional offences for this group. For speeding and driving under the influence of alcohol, however, thresholds may be considered to be lowered for novice drivers.

There is no scientific support for prolonging disqualification periods; the focus should primarily be on correction of behaviour at an early stage, in order to prevent offending from becoming a habit.

Different treatment for professional drivers?

There are several differences between professional and non-professional drivers that are relevant when considering their treatment within a DPS:

- The exposure of professional drivers is up to ten times the exposure of an average car driver and, as such, they may be assumed to be very experienced drivers.
- Professional drivers generally have a higher responsibility in traffic than average drivers: e.g. carrying passengers, transporting dangerous goods, or driving large or heavy vehicles that in the case of a collision results in severe, often fatal injury for other road users.

In most countries professional drivers are treated just like all other drivers in terms of the application of the DPS. Some countries, however, treat them differently, e.g. by including offences which typically or exclusively apply to professional drivers or by assigning other, often leaner consequences, such as shorter disqualification periods or a shorter lifetime of points. Italy distinguishes between a “professional” and a “private” licence, with offences while driving professionally being collected only in the “professional” record.

Recommended practice

Given their specific responsibility in traffic, it is recommended to adjust DPS regimes for the group of professional drivers by including particular relevant offences, notably violations of the rules on driving and resting times, tachograph manipulations, poor technical conditions of the vehicle, and cargo securing deficiencies. Despite their usually high exposure, they should not be given advantages in terms of shorter lifetime of points or a shorter disqualification period.

At the same time, it must be recognised that for some aspects of their task professional drivers are dependent on employers and hauliers. Therefore, Member States should take care that Directive 2006/22/EC on social legislation relating to road transport activities is thoroughly implemented and enforced. This Directive is directed at transport companies – not drivers – and mandates the introduction of a risk rating system based on infringements related to the working hours on heavy goods vehicles and buses as well as to driving and rest times.

What about alcohol and drug offenders?

Even though alcohol and drugs are known to substantially increase crash risk, only 14 countries include alcohol and only 12 include drugs offences in their systems. An important reason for excluding these offences is that the offenders are treated by special measures beyond the DPS, such as immediate licence withdrawal and psychological driver assessment.

Recommended practice

Scientific evidence indicates that both alcohol and drug offences should be considered severe offences in the DPS, as the immediate link with crash causation is obvious. However, the offenders might need a different treatment, since the ordinary intermediate and rehabilitation measures in a DPS are not effective for offenders with an addiction problem. Hence, in case of severe alcohol or drug offences individuals should be thoroughly tested with regard to whether they are alcohol or drug dependent; in such a case targeted addiction treatment (usually outside the DPS), possibly accompanied by immediate but temporary licence withdrawal is required. Drink driving recidivists and high-level first-time offenders may need longer term behavioural or psychological assistance and technical monitoring, e.g. by allowing them to drive only a car equipped with an alcohol interlock for a defined time period.

Including or excluding non-motorised road users?

In considering non-motorised road users there are two main questions. Firstly, whether or not to include pedestrian and/or cyclist offences of driving licence-holders in the DPS and secondly whether or not to have a DPS for non-licence-holders. Only a few countries consider offences of non-motorised road users in their DPS and only when they hold a driving licence. The only country assigning points to pedestrians is Germany. Cyprus includes alcohol and drug offences committed by cyclists. Poland also includes other cycling offences. In practice, however, both countries apply these rules infrequently. Germany includes cyclists for a number of offences including red-light running, alcohol or drug use, and endangering other road users.

Recommended practice

In theory a DPS could be effective for all road users and not only for driving licence holders. However, in practice this would substantially complicate the organisation and administration of the system. So far there is no experience with such a wide application of a DPS. Therefore, it is recommended to target the DPS at driving licence holders only. However, the system does not have to be limited to offences committed as a driver or rider; it could also include offences committed e.g. as pedestrian. Severe offences committed by non-motorised road users without a valid driving licence – be it as pedestrians, cyclists or while (illegally) driving powered vehicles – could be kept on file in order to, for example, issue special restrictions if such a person applies for a driving licence at a later date.

How to treat “repeat recidivist” offenders?

“Repeat recidivists” are the – usually small – group of drivers who arrive at licence disqualification levels more than once. For these offenders, France, Greece and Romania double the disqualification period. Austria, Denmark, Greece and Romania apply variable periods of disqualification, considering previous licence withdrawals.

Recommended practice

“Repeat recidivists” show general difficulties with adhering to regulations and may pose a serious threat to society. Merely prolonging the licence disqualification period will, however, hardly be the ultimate response to this problem. Hence, it is recommended to apply thorough rehabilitation to this group, comprising psychological diagnostics and courses targeted at behavioural and attitudinal change before reinstatement of the licence (see Chapter V on intermediate and rehabilitation measures).

In summary, for differentiation between road user groups it is recommended to

- ▶ Apply special conditions for novice drivers, e.g. by lowering thresholds for intermediate measures and disqualification.
- ▶ Adjust DPS regimes for professional drivers by including specific offences, considering their dependency of employers and hauliers, however, without advantages in terms of a shorter lifetime of points or a shorter disqualification period.
- ▶ Test drink driving recidivists and high-level first-time offenders early and thoroughly to find out whether or not they are alcohol/drug dependent. Where dependence is evident addiction treatment (usually outside the DPS) is required, together with rehabilitation programmes that may include being allowed to drive only cars equipped with an alcohol interlock.
- ▶ Target the DPS at holders of driving licences, but include relevant offences committed as non-motorised road users. Severe offences committed by non-licence holders could be kept on file having consequences when applying for a licence at a later stage.
- ▶ Subject “repeat recidivists” to psychological diagnostics and driver improvement courses targeted at behavioural and attitudinal change before reinstatement of the licence.

IV . The role of enforcement and communication

Demerit Point Systems, as all countermeasures that affect a licensing process, are unlikely to function properly without sufficiently high levels of enforcement, complemented with media coverage ⁷. If people consider it improbable that an offence will be detected, a DPS may not exert the required deterrent effect. Insufficient enforcement levels are commonly considered the main reason that the effect wears out rather soon after the introduction of the DPS. People are smart: they will soon realise that the chance of being caught is much lower than communicated.

Providing and maintaining enforcement at a sufficiently high level, while taking account of the available budget, requires a series of (interrelated) decisions on:

- Enforcement methods, in particular the use of camera enforcement
- Driver versus owner liability
- Communication to support enforcement efforts

For more general information about effective police enforcement, we refer to the SUPREME handbook for best practices in road safety and the thematic report on enforcement ⁸.

Which methods to use?

Basically, two enforcement methods can be identified:

- Police patrols
- Automatic mobile and fixed enforcement

In the case of police patrols, police officers trace traffic offences while driving or while standing at the roadside and they stop offenders immediately for sanctioning. Police checks can be random or selective, i.e. checking all passing cars or checking only those that are suspected. Automatic enforcement makes use of fixed and mobile cameras; the offender does not need to be stopped since the vehicle owner or the driver is identified by means of a picture. Currently, automatic enforcement is mainly focused on speed and red light violations. On-going developments in digital video and image processing technologies will increasingly allow for automatic enforcement of seat belt use, time headway, lane keeping and many other rules.

Currently, the majority of countries with DPS's apply both police patrols and automatic enforcement methods. Most countries allow for random checking, although in some countries drivers can only be checked by the police when there is some kind of suspicion (e.g. in case of drink-driving the smell of alcohol or awkward behaviour).

⁷Twisk, D.A.M, Stacey, C., 2007. Trends in young driver risk and countermeasures in European Countries. *Journal of Safety Research* 38, 245–257.

⁸SUPREME Best Practices in road safety; handbook for measures at the country level (publication C; available in English and 17 other EU languages) and SUPREME Thematic report – Enforcement (publication F6; available in English only) http://ec.europa.eu/transport/road_safety/projects/doc/supreme.pdf

Current enforcement methods for speeding, seat belt use and drink driving

Enforcement methods	Type of offence		
	Speeding	Seat belt use	Drink driving
Automatic	<ul style="list-style-type: none"> ● fixed speed cameras ● mobile speed cameras ● section/average speed control 	<ul style="list-style-type: none"> ● fixed cameras ● mobile cameras 	-
Police patrols	<ul style="list-style-type: none"> ● speed checks by radar or laser device 	<ul style="list-style-type: none"> ● random checks ● selective checks 	<ul style="list-style-type: none"> ● random breath testing ● selective breath testing

Recommended practice

Given a particular budget and limited capacity, automatic enforcement results in a much larger chance of apprehension than police patrols, and consequently has a much larger deterrent effect. Therefore, it is recommended to include automatically detected offences in a DPS. It is also recommended to apply random checking in addition to selective methods. Again this increases the chance of apprehension, both objectively and subjectively. Finally, it is recommended to apply a mix of highly visible and unpredictable enforcement, since this is known to increase the subjective chance of apprehension.

Driver liability or owner liability?

Including or excluding automatically detected offences touches on the issue of driver and owner liability. In the case of **driver liability**, the driver must be identified. With police patrols where the vehicle is stopped after an offence, this is straightforward. When an offence is detected through camera enforcement, there are two main approaches taken to identify the driver:

- Taking a picture of both the licence plate and the driver.
- Taking a picture of only the licence plate and requiring the vehicle owner to identify the responsible driver (mandatory nomination of the driver).

The first option can be problematic for helmeted riders of powered two-wheelers.

In case of **owner liability**, it is left to the owner either to pay the fine for an automatically detected offence or to prove that s/he was not the driver.

When it comes to assigning points, in most EU countries with a DPS the vehicle owner will not be assigned any points if he refuses to indicate the name of the driver, but he will be asked to pay a fine for the offence committed with his vehicle. The Czech Republic, Hungary, Ireland, Malta, Spain and UK also apply owner liability within the DPS: vehicle owners receive both points and penalties when they do not name the driver responsible at the time of the offence.

Recommended practice

It is recommended to apply a system that, in case of camera-detected offences, assigns the points to the actual driver rather than to the vehicle owner. This can best be realised by first identifying the vehicle owner through a picture of the licence plate and, subsequently, obliging him/her to identify the driver. Failure to identify the driver should result in the assignment of points to the owner. Incorrectly or falsely naming a driver must be considered as a severe offence and punished in order to fight points trafficking. Though technically more difficult and expensive, it is also possible to identify the driver by means of a picture of the front of the car at the time of the offence.

What is a sufficiently high level of enforcement?

Theoretically, we may expect the following interactions between levels of enforcement of a DPS and behaviour change:

- With low levels of enforcement and drivers initially expecting a high level, a DPS may change driver behaviour on the short term; however, as soon as drivers realise that the actual enforcement level is low, the effect will disappear.
- With moderate levels of enforcement but a high perceived risk of being caught thanks to good communication, a DPS is likely to have an effect on driver behaviour that is stronger than the effect of enforcement alone. This effect may last for a longer time.
- With high levels of enforcement and a high perceived risk of being caught, a DPS is unlikely to have an additional effect on driver behaviour on top of the effect of enforcement alone, if sanctions are substantial. The DPS may increase the number of licence suspensions compared to normal sanctions, and as such have the added value of removing a larger number of risky drivers from traffic.

In the following, we will try to give some guidance for adequate enforcement levels, starting from current practice.

When looking at speed cameras, their numbers are highest in the UK, Germany and France with between 2,000 and 5,500. In Portugal there are only 30 speed cameras. The number of cameras per population is highest in Belgium, Austria and Sweden.

Speed camera density in several EC countries

Countries	Inhabitants in millions*	Number fixed speed/red light cameras**	Number of devices per population
Moderate to high enforcement levels			
Austria	8	1,100	1: 7,300
Belgium	10	1,700	1: 5,900
France	65	2,500	1: 26,000
Germany	81	3,700	1: 22,000
Netherlands	17	1,400	1: 12,000
Sweden	9	1,100	1: 8,100
UK	63	5,500	1: 12,000
Low enforcement levels			
Bulgaria	7	81	1: 86,000
Portugal	11	30	1: 366,000
Spain	47	1,300	1: 36,000
* Rounded numbers			
** Source: Speed Camera Database accessed 27th October 2011 http://www.scdb.info/			

Roadside alcohol tests are most common in Finland, Norway and Sweden with respectively 385, 338 and 287 drivers per 1,000 inhabitants tested in 2008. Alcohol tests are also relatively common in France, Cyprus, and Slovenia. Nevertheless, even in these countries the chance for a driver being breath tested in a particular year is only about 1 in 5.

Density of roadside alcohol tests in several European countries

Country	Roadside alcohol breath tests per 1,000 population
Finland and Norway	> 300
Sweden	287
France, Cyprus, Slovenia	180 - 200
Greece, Hungary, Ireland, Spain	110 - 135
Austria, Denmark, Estonia, Great Britain, Italy, Lithuania, Portugal, Poland	< 100

Source: ETSC (2010). Road Safety Target in Sight: Making up for lost time. 4th Road Safety PIN Report. European Transport Safety Council, Brussels

Recommended practice

It is recommended that moderate to high levels of enforcement are provided. When looking at two major enforcement areas, speeding and drink-driving, some indications about the required level of enforcement can be provided.

- Regarding speed cameras, it is recommended to provide high levels such as currently found in Belgium, Austria and Sweden.
- Regarding drink-driving, it is recommended that countries strive for testing at least one out of five drivers annually.

Furthermore, it is recommended to vary time, location, focus, and means of enforcement (and media coverage), since perception and information processing theories show that people pay specific attention to events that do not match their expectations. This would mean that the perceived risk of being caught can be increased by bringing in variation in enforcement activities so that enforcement is unpredictable and more difficult to avoid.

Additional considerations about speed cameras

In practice the number of speed cameras should not be determined by simply looking at the number of inhabitants. It should rather be based on the number of road sections with many speed-related crashes, where alternative measures like road design and credible speed limits are not feasible or (cost-)effective.

Another issue is the exact location and the visibility of the cameras. For transparency reasons, it is recommended to organise the implementation of speed cameras (or other type of enforcement cameras) based on clear guidelines for location and monitoring, and with political and financial accountability.

Communicating to increase the subjective level of enforcement

The essential element of effective enforcement is the perceived risk of being caught when committing an offence. Obviously, the subjective chance is largely determined by the objective, actual chance of being caught. However, it is also substantially affected by communication campaigns and media coverage of enforcement operations, its aims and results, through newspapers, magazines, radio, television, as well as social media. In this regard local communication rather than (just) national publicity can be particularly effective.

Another important aim of communication is to increase public support for a measure, in this case for the usefulness and fairness of the DPS and the related enforcement.

Currently, all countries use some form of communication to accompany the DPS. Generally, however, the communication activities are largely concentrated in the DPS implementation period.

Recommended practice

Communication about the DPS and the related enforcement needs to be maintained and to take place at regular intervals.

If support for the DPS is lacking, public campaigns should address this first. Subsequently, media should provide information on regional or national enforcement activities and their outcomes. Furthermore, it is equally important to give information that stresses rule compliance. Since people are inclined to behave in conformity with the majority, information about the behaviour of the majority can be used to change the subjective norm.

In order to make the DPS visible it should be made sure that a relevant proportion of drivers have lost/gained points and that a lesser but equally relevant share has had their licence revoked. This will also contribute to changing the subjective norm.

In summary: Enforcement levels and methods

- ▶ Moderate to high levels of enforcement are needed to make a DPS work.
- ▶ Automatic camera enforcement and random breath testing are indispensable methods for bringing enforcement to a sufficiently high level.
- ▶ In the case of camera-detected offences, the points should be assigned to the actual driver rather than to the vehicle owner. This can be realised by the mandatory nomination of the driver by the owner, or by taking a picture of the driver at the spot. If the driver remains unidentified, points should be assigned to the vehicle owner.
- ▶ Communication about enforcement needs to be maintained regularly, both on local and national levels, and should provide information on rule compliance in addition to rule violation in order to promote the social norm.
- ▶ There should be regular public information on safety effects (and targets) as well as on the proportion of drivers with points and revoked licences.

V. Applying intermediate and rehabilitation measures

An inherent part of a Demerit Point System is the use of intermediate and rehabilitation measures. Intermediate measures are measures that help drivers to avoid losing their driving licence, e.g. warning them that they have reached a particular number of points or having them participate in a driver improvement course on either a mandatory or voluntary basis. Rehabilitation measures are measures that drivers have to go through in order to regain their withdrawn licence, for example, a mandatory rehabilitation course, a psychological test, and/or a new driving test. The main issues here are:

- What measures to take and at what stage?
- How to design driver improvement and rehabilitation courses?

What measures to take? A four-step approach

All DPS countries apply some intermediate and/or rehabilitation measures, but there is a lot of difference between countries in terms of what measures they apply and whether they are mandatory or voluntary.

Intermediate measures include:

- Informative letters – informing about the amount of penalty points collected.
- Warning letters (often in combination with an informative letter) – indicating the consequence of having penalty points and any possibilities for remedying this situation.
- Voluntary driver improvement courses – addressed to drivers with a certain amount of penalty points, possibly giving them an opportunity to reduce them; their aim is to provide knowledge, to improve abilities, or to change attitudes and behaviour; they can be directed at a particular problem, e.g. drink driving, speeding.
- Mandatory driver improvement courses – addressed to drivers, who reach a certain level of points. Failure to attend the course results in withdrawal of the driving licence.

Rehabilitation measures (required to regain the licence) include:

- Rehabilitation courses
- Medical and psychological tests
- Theoretical and practical driving tests

Recommended practice

Overall, it is recommended to take a four-step approach to applying intermediate and rehabilitation measures:

1. Sending out information and warning letters;
2. Mandatory participation in a driver improvement course;
3. Temporary withdrawal of the licence;
4. Mandatory rehabilitation measures before regaining the licence

At what thresholds should measures be applied?

Most of the countries send out information and/or warning letters; the thresholds vary between one-thirds and three-quarters of the maximum amount of points.

Voluntary participation in a driver improvement course is most often possible until almost the ultimate number of points is reached. A common incentive to motivate voluntary participation is the remission of points. If no incentive is set, participation rates are normally poor.

The thresholds for mandatory participation in a driver improvement course vary between when half to three-quarters of the total points are reached. Mandatory participation usually does not affect the point account. If the course is not attended, the licence is withdrawn.

Examples of the thresholds for applying intermediate measures

Intermediate Measures	Applied thresholds (percentage of maximum number of points)
Informative/warning letters	Austria: 33% Estonia: 50% and 75% Finland: 67% France: 50% Germany: 45% Greece: 60% Hungary: 78%, Latvia: 25%, 50% and 75%
Voluntary driver improvement courses ⁹	Bulgaria: 0-97% Cyprus: >58% Czech: 0-75% Estonia: 0-92% France: 0-93% Germany: 0-72% Hungary: 0-94% Italy: 0-95% Luxembourg: 0-92% Poland: 0-96% United Kingdom: no point limit, course instead of points for speeding offences
Mandatory driver improvement courses	Austria: 67% France: 50% (mandatory only for novice drivers) Germany: 78% Latvia: 50%

Recommended practice

There is insufficient theoretical basis to give very specific recommendations about the thresholds for the various intermediate measures. As an indication only, it is recommended to

- Send out an information letter each time a driver is losing or gaining points.
- Send a warning letter when drivers approach the threshold for a driver improvement course.
- Impose a driver improvement course to offenders, at least one severe offence away from the initial value and more than one severe offence away from licence withdrawal.

Which rehabilitation measures to take?

When the maximum number of points are lost or gained, the licence is withdrawn. Across the various DPSs in the EU, withdrawal periods currently range from one month to, in severe cases, 10 years.

In order for the licence to be reinstated, the most common practice is to test the offender's theoretical knowledge or practical driving ability in an exam. In some countries, the offender has to follow some theoretical and practical driving lessons. Training and testing skills and

⁹ Participation in voluntary courses can occur any time, meaning everyone, even persons with zero points can participate. This leads to the large range.

knowledge, however, are questionable as repeat offenders often have deficits in their attitudes towards traffic regulations and in their behavioural ability to comply with the rules. As a consequence, rehabilitation measures aimed at shaping attitudes and behaviour can be expected to be more effective than measures targeting only knowledge and driving skills.

In some countries, therapeutic sessions are part of the rehabilitation process and in a few countries, frequent offenders have to pass a psychological and/or medical assessment aimed at only letting those that are fit to drive back onto the road.

Recommended practice

It is recommended, based on the results of the DRUID project ¹⁰, to set withdrawal durations between 3 and 12 months. The deterrent impact of shorter and longer durations has not been proven; a longer withdrawal period leads in general to an increase in driving without a licence.

In addition, it is recommended to focus the DPS rehabilitation measures on attitudes and behaviour rather than on knowledge and skills. A broader medical-psychological examination and longer term behavioural or psychological assistance or monitoring could be considered as part of a re-granting procedure for specific types of repeat offenders, e.g. in the case of alcohol and drug dependence or personality disorders.

Since the evidence of the effectiveness of rehabilitation measures is not conclusive, it is recommended to also consider technological measures, either instead of licence withdrawal or conditional for (earlier) licence reinstatement. In this regard technology that should be considered includes, for example, an alcohol interlock for drink-drivers, an ISA system for speeders, or, more generally, event data recorders to monitor driving behaviour and provide targeted feedback.

How to design driver improvement and rehabilitation courses?

In most DPSs, driver improvement courses and driver rehabilitation courses generally have a central place. It must be borne in mind, however, that these courses do not automatically have the intended effect, i.e. making drivers safer. The contents and set-up of such courses is of crucial importance. For a more extensive overview of good practices in this area we refer to the SUPREME handbook and the thematic report on rehabilitation and diagnostics ¹¹. Here we just touch on the most important aspects.

Current driver improvement courses for repeat offenders are usually targeted at improving knowledge. All courses are conducted as group courses, except the practical driving lessons. Courses take between 3 and 16 hours and are often led by driving instructors; in some cases they are supported by psychologists. A few countries apply different courses for different offender groups. A very specific way to change the offenders' behaviour is traffic psychological counselling. In a single setting, the offender receives professional support from a psychologist who analyses the problematic behaviour and its origin, and develops personal strategies for safer driving. This approach aims to meet the needs of the individual.

¹⁰ DRUID - Driving under the Influence of Drugs, Alcohol and Medicines; Integrated Project co-funded by the EC in the 7th Framework Programme. <http://www.druid-project.eu>

¹¹ SUPREME Best Practice in road safety; handbook for measures at the country level (publication C; available in English and 17 other EU languages) and SUPREME Thematic report – Rehabilitation and diagnostics (Publication F3; available in English only) http://ec.europa.eu/transport/road_safety/projects/doc/supreme.pdf

Recommended practice

It must be noted that the evidence base for the effectiveness of intermediate and rehabilitation courses is mixed. Positive effects are more likely when:

- The courses focus on specific types of offenders, e.g. drink-drivers, excessive speeders, young drivers, and the contents and approach are tailored to their specific problems.
- The courses focus on improving attitudes and behaviour, rather than driving skills and knowledge.
- The instructors have a high didactic quality, sufficient traffic safety-related knowledge and skills, and a strong commitment.
- The groups are small (< 6).
- The course consists of several sessions over a few weeks.
- Offenders with addiction problems and/or personality disorders are treated in a specific setting, preferably individually targeted.

Intermediate and rehabilitation measures: in summary

- ▶ For intermediate and rehabilitation actions, a four-step approach is recommended:
 1. Information letters each time a driver loses or gains points, and a warning letter when approaching the threshold for a driver improvement course.
 2. A mandatory driver improvement course, at least one severe offence away from the initial value and more than one severe offence away from licence withdrawal value, focusing on attitudes and behaviour rather than on knowledge and skills.
 3. Licence withdrawal for a period of between 3 and 12 months.
 4. Mandatory participation in a rehabilitation course for reinstatement of the licence. The course should focus on attitudes and behaviour rather than on knowledge and skills; for offenders with a potential alcohol/drugs problem or a personality disorder, a medical-psychological examination and longer term behavioural or psychological assistance or monitoring should be included.
- ▶ In order to increase the potential effect of driver improvement and rehabilitation courses, specific attention should be paid to the curriculum, the organisational aspects of the course and the skills of the instructors.

VI. Organising, administering and monitoring DPS

A Demerit Point System requires well-oiled organisational and administrative machinery to efficiently process the assigned points of millions of drivers and to initiate the appropriate and timely follow-ups in terms of intermediate and rehabilitation measures. Moreover, these type of data provide the basis for systematic monitoring of the system's performance.

Elements to consider when deciding on the organisational structure of the DPS include:

- Cost and time efficient administration
- Transparency
- Fraud prevention
- Monitoring efficiency and effectiveness

How to make the DPS administration cost and time efficient?

The administration of DPS's is organised in different ways across Europe. The majority of countries have only one organisation for both point administration and the implementation of actions/measures. Most of the remaining countries have two organisations involved while in Ireland there are three. The DPS administration is most often in the hands of a national ministry or the Police. Road safety authorities and licensing authorities are also involved.

Institutions involved in the administration of DPS in various DPS countries

Countries where the administration of the DPS, the points collection and the enforcement of the follow-up measures are carried out by one institution	<ol style="list-style-type: none"> 1. Cyprus, Denmark, Poland, Romania (Police) 2. France (Ministry of police, overseas, territories and immigration) 3. Great Britain (Driver and Vehicle Licensing Agency) 4. Latvia (Road Traffic Safety Department) 5. Netherlands (Public Prosecution Service) 6. Spain (Ministry of Interior, Directorate General for Traffic)
Countries where the administration of the DPS and the points collection is centralised to one institution and the enforcement of follow-up measures is carried out by local authorities	<ol style="list-style-type: none"> 7. Austria (Ministry of Transport + authority of the offender's place of residence) 8. Czech Republic (Ministry of Transport + 205 authorised municipalities) 9. Finland (Finnish Transport Safety Agency + Police) 10. Germany (Federal Motor Transport Authority + all local driving licence authorities) 11. Greece (Ministry of Transport and Communication + Police) 12. Italy (Ministry of Infrastructure and Transport + Police) 13. Malta (Transport Malta + Police and the Local Wardens)
Countries where three or more institutions are involved in the administration of DPS, points collection and enforcement of measures	<ol style="list-style-type: none"> 14. Ireland (Road Safety Authority + Department of Transport + the Garda)

The cost of the human resources required to administer a DPS are largely unknown as are the operating expenses and computing costs. Therefore, it is difficult to assess the total costs of running a DPS and its cost-effectiveness.

Recommended practice

It is difficult to give straightforward recommendations for the administration and organisation of a DPS, since it has to fit into existing organisational structures and existing working procedures and cultures. However, the following considerations should be taken into account:

- Keep the system simple and look for a good balance between the desire to, for example, include many offences or differentiate the number of points based on the seriousness of the offence and the manageability of administering and organising the system.
- A central register in which all information about each offender comes together is necessary to identify repeat offenders and to calculate the actual points' status.
- Where more than one organisation is involved the duplication of work should be avoided. The use of a central register which triggers action of local authorities only when needed is seen to be very efficient.
- Computerise the administrative processes as much as possible, e.g. for transferring of offence information, calculating points' status and thresholds for follow-up actions, and for sending personalised information and warning letters.

Special attention should be paid to integrating the system for administrative penalties and court decisions in order to limit the lead time of the latter, and to minimise the burden for courts, e.g. in case of appeals.

A French call for administrative pre-trials

In France drivers can go to court to contest their licence withdrawal. This constitutes a heavy burden to the courts, representing around 6% of the new cases in the French administrative courts. The vast majority of the appeals are based on the failure to give advanced information about the withdrawal as required by French law. Some French traffic safety experts call for administrative pre-trials, which would have several advantages, including:

- ▶ Speeding up the process, i.e. no need to wait for the court's decision;
- ▶ Improving administrative efficiency by recognising in time whether licence withdrawal is lawful and should be continued;
- ▶ Reduction of work load of the courts.

How to make the system transparent for users?

To create and maintain acceptance among the public, the DPS must be clear, transparent and considered to be fair. This relates to, for example, the offences that are included in the system, the associated points, the consequences in terms of driver improvement courses, licence withdrawal and licence reinstatement, and, last but not least, the actual up-to-date points' status of the individual driver.

In general, DPSs are considered to be fair and are well accepted. In most countries drivers have easy access to their points account, often via the Internet.

Recommended practice

Transparency of the system can be realised by

1. Applying a straightforward and simple strategy for target offences, number of points, lifetime of points and consequences for passing the various thresholds.
2. Repeatedly communicating the reasons for and aims of the DPS to the public.

3. Providing easy access to up-to-date information about drivers' points' status through internet or, for non-internet users, on request in writing. The personal information can be used to provide targeted information about the (latest) offence and its relevance for road safety. For providing up-to-date information, it is important that the time between the detection of an offence and its legal confirmation is very short and that the required DPS actions can take place soon after the last offence. That way the corrective and selective effect of the DPS is larger.

Is it possible to prevent DPS-related fraud?

Like most rules and regulations, a DPS is to some extent susceptible to fraud. The two main types of fraud in relation to a DPS are

- continued driving after licence withdrawal, and
- points' trafficking.

It is not known how many drivers are driving without a valid licence. However, this problem must be addressed as unlicensed drivers have been found to have a higher collision rate and may also be inclined to drive on after a crash (hit-and-run) in order to avoid being caught without a licence. It must be noted that those who continue driving after their licence has been withdrawn through the DPS are just one group of unlicensed drivers. There is no information about the size and specific characteristics of this group.

Points' trafficking happens when points are transferred to someone else. This can be a particular problem in countries where the DPS includes automatically detected offences without direct identification of the driver. Objective information about the extent of the points' trafficking problem is also lacking. Various internet sites, however, show that it occurs and that sometimes large amounts of money are offered to take points from someone who is about to lose the licence. The majority of points' trafficking, however, seems to take place within the family or the direct social network.

Recommended practice

Both unlicensed driving and points' trafficking are expected to impact negatively on the deterrent effect of a DPS since frequent and dangerous offenders may feel that they can outsmart the system and can continue driving despite committing regular offences. Therefore, anti-fraud policies should be reviewed as part of the initial design of a DPS. More specifically, it is recommended to:

- Send targeted information to holders of recently withdrawn licences specifying the legal and financial consequences of unlicensed driving.
- Encourage organisations which employ people that have to drive as part of their job to check the licence validity of their employees on a regular basis ¹².
- Introduce heavy penalties for false testimony and for points' trafficking; communicate this to the public.
- Regularly scan for points' trafficking internet sites, tracking site administrators as well those who 'advertise' on these sites.

¹² More information can be found in the PRAISE Handbook focusing on work-related road safety http://www.etsc.eu/documents/praise/PRAISE_Handbook.pdf

Why and how to monitor efficiency and effectiveness?

The collected administrative data provide a valuable database to monitor the DPS operations and to perform analyses. Data offer two opportunities:

- Daily statistics for monitoring system performance and detecting operational errors. For example, if there is a large variation in the number of notifications, this would trigger the search and identification of the problem.
- A source of information for communication campaigns and for policy decisions. For example, the data collected through the DPS provide information about the occurrence of offences included in the DPS and the developments over time. When interpreting the data, it must be kept in mind that there is a direct relationship between number and type of fines, and the level and focus of the enforcement activities in a particular period.

Recommended practice

It is recommended to monitor the system both on a daily basis, as a tool for quality assurance of administrative operations and, on at least an annual basis, as a tool for assessment of the developments over time of safety relevant offences and the working of the DPS as a whole.

Currently, the empirical information about the effectiveness of a DPS in general and of the different features of a DPS is limited. Therefore, it is recommended to set up an EU DPS database and to collect basic statistics of national DPS's (e.g. number of offences in specified categories, number of licence withdrawals), as well as some objective performance indicators (e.g. speeding, drink-driving, seat belt use), and type and intensity of enforcement and communication measures. Such a database would at least provide an indicative assessment of the effect of different DPS's and their characteristics.

In summary: Organisation, administration and monitoring

- ▶ Have a central administration for managing offences/points, offenders, and intermediate/rehabilitation measures.
- ▶ Apply simple, clear, fast and largely automated administrative procedures.
- ▶ Ensure easy access for offenders to up-to-date information about their point status, e.g. via Internet.
- ▶ Develop anti-fraud policies (unlicensed driving and points' trafficking), enforce them and communicate them to the public.
- ▶ Produce daily statistics about notifications as a tool for quality assurance of administrative procedures.
- ▶ Produce regular, at least annual, statistics to monitor the DPS and the developments over time in terms of specific offences.
- ▶ Set up an EU DPS database and collect the basic statistics of Member States' DPS's.

VII. Future perspectives: towards an EU-wide DPS?

An increasing number of countries have bilateral or multilateral agreements to exchange information about traffic offences committed in a country other than the home country and for imposing and collecting fines. However, offences committed abroad do not generally affect the status of the Demerit Point System in the home country. Hence, substantial safety gains can be expected from an EU-wide cross-border information exchange on points and/or offences. In addition, given the large and still increasing amount of cross-border traffic, the current practice can be seen as unfair and a form of inequality of justice between EU citizens. The European Commission therefore convened a group of national and European safety experts in a BestPoint workshop in order to identify further steps towards an EU-wide DPS.

A gradual approach

Because of different legal situations in the Member States – different kinds of offences, different types of DPS and countries without a DPS, it is best to have a gradual approach in working towards an EU-wide DPS. Five steps were identified, with the last step, one single and binding DPS at EU level, as a long-term scenario.

A five-step approach towards an EU-wide DPS

1. The authorities of the country of the offence pass on the information on (certain) offences to the driver's country of residence.
2. The European Commission recommends that all countries adopt a DPS, referring to the outcomes of BestPoint for guidelines for the implementation of a maximally effective DPS.
3. National authorities create a virtual national driving licence for every non-resident offender stopped for the first time, based on the experiences such as in the UK, Italy, the Czech Republic and Luxembourg.
4. Every country has a DPS that includes at least a minimum list of offences, but each Member States can decide the number of points per offence. A conversion table allows for points exchange between countries.
5. As a long-term scenario, there will be one single and binding DPS at EU level, including intermediate and rehabilitation measures, for all Member States.

Step 1: Exchange of information

Realisation of the final step of establishing one single and binding DPS at EU level is a long-term scenario, if possible at all within the prevailing subsidiarity principles. The first step, however, exchange of information about offences, is within reach simply by linking to existing European legislation.

In this respect it is recommended:

- To exchange information between countries about those offences that are mentioned in the Cross Border Enforcement Directive (Directive 2011/82/EU) since these are of great importance for road safety:
 - ◆ speeding;
 - ◆ non-use of a seat-belt;
 - ◆ failing to stop at a red traffic light;
 - ◆ drink-driving;
 - ◆ driving under the influence of drugs;
 - ◆ failing to wear a safety helmet;
 - ◆ use of a forbidden lane;
 - ◆ illegal use of a mobile phone or any other communication devices.
- To implement the exchange of information on these offences by amending Article 15 of the Third Driving Licence Directive (Directive 2006/126/EC) or by implementing a new Article.
- To use the planned driving licence network RESPER for the exchange of committed offences. RESPER (RÉSau PERmis de conduire) will contain information on the licences that have been issued, exchanged, replaced, renewed or revoked in EU Member States and will be operational in January 2013. Preferably, the network will work online so that the information is available immediately, also for the police out in the street.

An important factor in relation to this type of data exchange is that data protection has to be guaranteed at EU level.

VIII. Summary and conclusion

Experiences so far have shown that the impact of a DPS on the number of crashes is often significant but temporary. However, the overall principles and basic assumptions of a DPS mean that it is expected to have considerable potential for a sustainable safety impact if planned, implemented and run according to the set of recommended practices, as compiled in the BestPoint project. The key mechanisms are prevention, selection and correction.



BestPoint recommendations for Demerit Point Systems

Basic Prerequisites

- High actual chance of losing the licence: enforcement levels & methods
- High perceived chance of losing the licence: communication on enforcement and withdrawals

Points & Offences

- Include only offences that have a straightforward relationship with crashes or crash severity
- Link the number of points and severity of offence

User groups

- Apply special conditions for novice drivers
- Include professional drivers and their typical offences
- Test alcohol and drug offenders early and thoroughly for addiction

Enforcement & Publicity

- Ensure moderate to high levels of enforcement
- Make use of automatic camera enforcement and random breath testing
- Assigning points to offending drivers whenever possible, otherwise to vehicle owners
- Regularly inform the public on safety effects (and targets) as well as enforcement levels and proportion of drivers with points and revoked licenses.

Intermediate and Rehabilitation Measures

Apply a four-step approach

- Warning letters
- Driver Improvement Courses
- Licence withdrawal
- Rehabilitation measures before reinstatement

Organisation, Administration & Monitoring

- Centralised & automated system
- Clear & simple
- Timely & easily accessible information for offenders
- Regular monitoring of the system



BestPoint

Criteria for BEST Practice Demerit POINT Systems

Project Coordinator: Austrian Road Safety Board (KFV)

Partners of the project: BASt, CErTH, CDV, DTU, ETSC,
IFSTTAR, ITS, KFV, MT, RSA, SWOV, VTT

Deliverable 3

The BestPoint Handbook Getting the best out of a Demerit Point System

August 2012

Authors: Ingrid van Schagen (SWOV) and Klaus Machata (KFV),
with contributions from Charles Goldenbeld (SWOV), Graziella Jost (ETSC),
Simone Klipp (BASt), Willem Vlakveld (SWOV) and Martin Winkelbauer (KFV)

www.bestpoint-project.eu

