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# Development of an Integrated Evaluation Instrument for Driver Rehabilitation Measures

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# **Development of an Integrated Evaluation Instrument for Driver Rehabilitation Measures**

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Authors: Birgit Bukasa, Eveline Braun, Ulrike Wenninger,  
Elisabeth Panosch (KfV, AT),  
Simone Klipp, Michael Escrihuela-Branz (BAST; DE),  
Sofie Boets, Uta Meesmann (IBSR; BE),  
Susanne Roesner, Luwdig Kraus (IFT; DE),  
Lila Gaitanidou (CERTH/HIT),  
Jean-Pascal Assailly (INRETS; FR).

Work Package Leader: Birgit Bukasa, KfV, AT

Project Co-ordinator: Horst Schulze, BAST, DE

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For cross checking of the evaluation tool DRET:

Annick Billard (FR)  
Armin Kaltenecker (AT)  
Christian Brandstätter (AT)  
Christian Gaudio (FR)  
Elisabeth Grillon (FR)  
Françoise Chatenet (FR)  
Gerhard Welisch (AT)  
Ilona Butler (PL)  
Josef Steinbauer (AT)  
Johannes Aichinger (AT)  
Karin Pettenburger (AT)  
Ludo Kluppels (BE)  
Michel Barthelemy (FR)  
Sandra-Bianca Schmidt (DE)  
Sarah Devlin (GB)

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## List of Abbreviations

ANDREA	Analysis of Driver rehabilitation programmes
AT or A	Austria
AUS	Australia
BAC	Blood alcohol concentration
BASt	Bundesanstalt für Straßenwesen (Federal Highway Research Institute), DE
BE	Belgium
BI	Brief Interventions
BIVT	Belgian Institute for Traffic Therapy
BIVV	Belgisch Instituut voor de Verkeersveiligheid, vzw (Belgian Road Safety Institute), BE
BMVIT	Ministry of Traffic, Innovation and Technology, AT
BrAC	Breath alcohol concentration
CA	Canada
CBT	Cognitive Behavioural Therapy
CERTH	Centre for Research and Technology Hellas
CH	Switzerland
CM	Contingency management
CZ	Czech Republic
DDR	Drink driver rehabilitation
DE	Germany; equivalent to GE
DG TREN	General Department for Traffic and Energy
DIN	Deutsche Industrienorm (German Industrial Norm)
DK	Denmark
DfT	Department for Transport at TRL
DR	Driver Rehabilitation
DRET	Driver rehabilitation evaluation tool
DUI	Driving under influence of alcohol
DUID	Driving under influence of (illicit) drugs
DWI	Driving while impaired/intoxicated
E's	(mostly: the 3 E's: Education, Engineering, Enforcement)
e.g.	exempli gratia (Latin): for example
EC	European Commission
EE	Estonia
EEC	European Economic Community
EL	Greece
EN	European Norm
ES	Spain
et al.	et alii (Latin): and others
EU	European Union
EUR	Euro
Euro NCAP	European New Car assessment programme
FeV	Fahrerlaubnisverordnung (German Driving Licensing Act), DE
FI or FIN	Finland
FR	France
FSG	Führerscheinggesetz (Austria Driving Licence Law), AT
FSG-GV	Führerscheinggesetz-Gesundheitsverordnung (Driving Licence Health Act), AT
FSG-NV	Nachschulungsverordnung Driving Licence Rehabilitation Act ), AT
HIT	Hellenic Institute of Transport
HU	Hungary
i.e.	id est (Latin): that is
IBSR	Institut Belge pour la Sécurité Routière, asbl (Belgian Road Safety Institute), BE
IE	Ireland
IFT	Institut für Therapieforchung (Institute for Therapy Research), DE
INRETS	Institut National de Recherche sur les Transports et leur Sécurité (National Institute for Transport and Safety Research), FR
ISO	Common short name for the International Organization for Standardization

IT	Italy
ITRD	International Transport Research Documentation
ITS	Instytut Transportu Samochodowego (Motor Transport Institute)
IVT-	Hö Individual Psychologische Verkehrs Therapie (traffic therapeutic model by Höcher, 2007)
KfV	Kuratorium für Verkehrssicherheit (Austrian Road Safety Board), AT
LSD	Lysergic acid diethylamide
LT	Lithuania
LU	Luxembourg
LV	Latvia
MA	Medical assessment, DE
MI	Motivational Interviewing
MPA	Medical psychological assessment, DE
MT or MLT	Malta
n or N	Number
n.d.	no date
n/a	Data not available
NGO	Non governmental organisation
NHTSA	National Highway Traffic Safety Administration, US
NIAA	National Institute on Alcohol Abuse and Alcoholism, US
NL	the Netherlands
NTA	National Transport Authority's, HU
p.	page
PL	Poland
PQ	Provider Questionnaire
PT	Portugal
QM	Quality management
RACV	Royal Automobile Club Victoria
RH	Rehabilitation
ROSE 25	Inventory and Compiling of a European Good Practice Guide on Road Safety Education targeted at young people
RS	Road safety
RSE	Road safety education
SE	Sweden
SI	Slovenia
SK	Slovakia
SUPREME	Summary and publication of best practices in Road safety in the Member States
TTM	Transtheoretical Model of Change
UK	United Kingdom
USA or US	United States of America
vs.	versus
WHO	World Health Organisation
WP	Work Package

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# Executive Summary

## Introduction

Work Package 5 (WP5) of the integrated EU research project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) deals with rehabilitation of substance impaired drivers. The overall aim of WP5 is to increase knowledge and to elaborate Europe-wide standards on intervention measures for offenders under the influence of alcohol (DUI) and illicit drugs (DUID).

The research activities in WP5 are carried out in two tasks:

Task 1 (WP5.1) provides a comprehensive overview on the state of the art in driver rehabilitation (DR) for DUI and DUID offenders. This activity is already finished and the outcomes are documented in Deliverable 5.1.1.

Task 2 (WP5.2) focuses on good practice as regards DR for DUI and DUID offenders. This includes the following four research activities:

1. In-depth analysis on reasons for recidivism & Analysis of change process and components in driver rehabilitation courses
2. Development of an integrated evaluation instrument for DR measures.
3. Analysis of existing quality management systems established along with DR schemes.
4. Validation of existing DR schemes.

The first and third research activities are already finished. The results are documented in Deliverable 5.2.1 (Good Practice: In-depth analysis on recidivism reasons & Analysis of Change Process and Components in Driver rehabilitation Courses) and in Deliverable 5.2.3 (Quality Management Systems established along with Driver Rehabilitation Schemes).

The deliverable at hand (WP5.2.2) is the result of the second research activity (Development of an integrated evaluation instrument for DR measures) and closes this part.

Six partners of WP5 were involved:

- Austrian Road Safety Board (KfV), Austria
- Belgian Road Safety Institute (IBSR/BIVV), Belgium
- Federal Highway Research Institute (BAST), Germany
- Institut für Therapieforschung (IFT), Germany
- National Institute for Transport and Safety Research (INRETS), France
- Centre for Research and Technology Hellas (CERTH-HIT), Greece.

## Research structure

The conduction of the research in WP5.2.2 is carried out in the following main steps:

1. Bringing together the entire WP5 research outcomes reached so far
2. Conduction of a WP5 expert workshop and a WP5 symposium
3. Conduction of a review on existing evaluation tools
4. Development of the evaluation tool itself.

Thereby steps 1 to 3 have a preparatory function as they served as information input sources for the actual tool development.

### **Methodology**

The development of the evaluation instrument itself was carried out within the WP5 research team. This was done during WP5 meetings, several WP5 sub team sessions, via telephone and e-mail between team members. The development process took place in a coordinated way, i.e. all main development steps were arranged within the WP5 team. While major parts of the tool development were carried out by the leading partner KfV, all other partners were involved in the reviewing and feedback phase. Moreover, in the cross-checking phase of the tool development external experts from several disciplines relevant for or linked to DR, driver assessment and/or road safety were involved.

### **Results**

The result of the research activity in WP5.2.2 is DRET, the Driver Rehabilitation Evaluation Tool. It covers the main technical issues of DR measures. 32 contents/items have to be evaluated in total whereby 15 items focus on (national) DR system issues and 17 items on single programme level. Evaluation of DR system and single programme is separated, DRET-S refers to the first and DRET-P to the second one. In order to assess single DRET contents against the DRUID WP5 standards relevant WP5 research outcomes are additionally provided.

The evaluation is carried out by means of a categorical answering mode with four alternatives (yes, partly yes, no, don't know) supported by a colour system. In principle, answering could be done either in an electronic or paper-pencil mode.

### **Conclusions**

With DRET an instrument is available which integrated all relevant findings in DR into an evaluation tool. It does not only consider current scientific or theoretical issues but also practical aspects such as (legal) frame conditions, assignment procedure and operation of DR. Additionally, it integrates the input of experts from several European Member States. The evaluation/answering mode has a user friendly design.

DRET can be used by several target groups who are directly or indirectly have to deal with DR issues and who are interested to evaluate their (national) DR system or single DR programme(s). Thus it is a research product with a broader range of application and not restricted to be used within the WP5 research team in order to validate existing DR schemes which is the next research activity to be done in WP5.

Moreover, on the longer run, DRET can be starting point of a European networking and documentation process of DR measures.

# 1 Introduction

## 1.1 Importance of research documented in this deliverable

The overall task of Work Package 5 (WP5) of the integrated EU research project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) is a comprehensive investigation of driver rehabilitation (DR) measures for the entire group of drink-driving (DUI) and drug-driving (DUID) offenders. The overall aim of WP5 is to increase knowledge and to elaborate Europe-wide standards on intervention measures for this problem group.

The deliverable at hand is the result of the investigations in WP5.2.2. It focuses on the development of an integrated evaluation instrument for DR measures taking all relevant research and outcomes of the entire WP5 gathered so far into account.

Four partners were involved in the research activities of WP5.2.2:

- Austrian Road Safety Board (KfV), Austria;
- Federal Highway Research Institute (BASt), Germany;
- Belgian Road Safety Institute (IBSR/BIVV), Belgium;
- Centre for Research and Technology Hellas (CERTH-HIT), Greece;
- Institute for Therapy Research (IFT), Germany;
- National Institute for Transport and Safety Research (INRETS), France.

## 1.2 Research activities in WP 5.2.2

Annex I of the DRUID Core Contract describes the research activities in task 5.2.2 one as follows:

*Development of an evaluation instrument for best practises. Based on the outcomes in 5.1 (state of the art) and taking the results of the empirical in-depth analyses on success/non success of RH (Rehabilitation) courses as well as the outcomes of the analyses of quality management systems into account, an integrated evaluation instrument will be developed. It will provide uniform criteria for judging a rehabilitation scheme as regards the main RH components (such as assignment procedure, adequacy and effectiveness of the RH measure for the target group, quality management). Qualified and responsible experts involved in the entire rehabilitation process (medical doctors, psychologists, police, justice, etc.) will cross-check this evaluation instrument.*

In order to cover the above mentioned issues, the following activities were carried out:

- Summary of already obtained WP5 research outcomes.
- Realisation of specific meetings in order to present and discuss the WP5 results reaches so far with two different target groups, namely those who are already working in the field of DR and those without this specific DR experience but being experts in related fields.
- Collection of information on existing evaluation tools.
- Realization of an instrument for evaluating DR measures based on the research results reached so far including a crosscheck of the tool by different experts.

## 1.3 Structure of deliverable WP 5.2.2

In principle the Deliverable 5.2.2 “*Development of an Integrated Evaluation Instrument for Driver Rehabilitation Measures*” is structured according to the above mentioned research activities.

## 2 Summary of previous WP5 research results

As the contents of the driver rehabilitation evaluation instrument to be developed have to be based on the WP5 research carried out so far, the outcomes and conclusions of the previous WP5 investigations are summarized at first. This is based on the Deliverables 5.1.1 (State of the Art in Driver Rehabilitation: Literature Analysis and Provider Questionnaire Survey) and 5.2.2 (Good Practice: In-Depth Analysis on Recidivism Reasons & Analysis of Change Process in Driver Rehabilitation Courses).

### 2.1 *State of the art in driver rehabilitation: Literature review and provider questionnaire survey*

#### 2.1.1 Main results of literature review

##### Identification of different types of DUI/DUID offenders

The literature review did identify multidimensional variables, which are related to increased risk for DUI/DUID and thus may provide relevant information about rehabilitation requirements.

**Socio-demographic variables.** Almost nine out of ten DUI/DUID offenders are male, although the amount of female offenders seems to increase. All studies report younger age groups (<35 years) to DUI/DUID more often than older age groups (>35 years). DUID offenders (essentially cannabis) often are even younger. DUI offenders generally have a lower educational level, are more often unemployed or involved in blue collar occupations and more often belong to the lower socio-economic strata. The majority lives as singles or separated; others are divorced. Regarding these last issues, very limited results are presented on drivers under influence of illicit drugs.

**Objective driving and lifestyle variables.** Most of the DUI/DUID offenders are highly suspicious for any kind of unsafe driving and a high amount tends to recidivate DUI/DUID. A lot of offenders have prior traffic offence records besides DUI/DUID, or other criminal records. Furthermore, some studies found a link with high driving frequencies and high mileages while others did not.

These variables allow a formal group-level identification of persons at increased risk for DUI/DUID. Other variables allow the identification of the mechanisms and/or problems underlying DUI/DUID, and thus of resources, needs, opportunities and/or limitations of the offender with regard to (certain types of) rehabilitation.

**Drinking behaviour.** Heavy to problematic alcohol consumption is over-represented, comprising regular, high, uncontrolled and inadequate consumption, binge drinking, abuse and dependence. Many first offenders may be moderate drinkers though. Co-morbidity of alcohol abuse or dependence and clinical disorders (e.g. depression) can sometimes be found within this population. Different studies found evidence for a link between DUI, reported stress and drinking for stress reduction.

**Illicit drug use.** Heavy consumption and dependency are strong risk factors for driving under the influence of one's favourite drugs. These heavy consumers often drive under influence for situational reasons. Multiple drug use and driving are quite often reported. A substantial amount of drug users reporting DUID also report DUI, although drug users/drivers generally report more negative attitudes towards drink driving than towards drug driving. Cannabis users are emphasized as risk group for DUID as cannabis is most frequently used in general and most often detected in DUID offenders.

Drivers under influence of cannabis (and even cannabis users in general) furthermore have more permissive DUID attitudes and low estimated risk perceptions.

**DUI related psychosocial characteristics.** Deviant drink and drink driving attitudes are among the main DUI characteristics, including attitudes favouring alcohol consumption (functions of alcohol), permissive drink driving attitudes and permissive attitudes towards general rule breaking. A lack of knowledge about the effects of alcohol, about responsible drinking and missing strategies to avoid drink-driving conflicts can increase the risk to DUI, as well as low risk perceptions like underestimation of the effects of alcohol on driving ability and of the accident or detection probability. An influence of alcohol related social norms/environment refers to the high impact of social models of DUI (essentially family, peers) and peer pressure, but also to the influence of the psycho(social) role of drinking. The important role of alcohol in social activities and the high susceptibility to peer pressure is specifically stressed among young persons. A “driver role” on the other hand may protect against normative group pressure. Specific decision making aspects seem to be related to engaging in DUI: low habitual moral attachment to the norm against DUI, low behavioural self-control and poor coping styles in combination with salient impelling cues (e.g. positive previous experiences, overestimation of driving capacities) and a lack of inhibiting cues. Low self-control is found to be an important psychological predictor of drink driving. Social aspects (social disapproval) can be identified as very important inhibiting cues for DUI.

**DUID related psychosocial characteristics.** Drug drivers often have more positive attitudes towards drug driving; have generally very low risk perceptions of drug effects on the driving ability and belief that the accident or detection probability is very low (essentially with regard to cannabis, but also stimulants); this is even more pronounced than for drivers under influence of alcohol. The influence of social norms/environment is characterized by peer pressure, although this seems to be less pronounced than for drivers under influence of alcohol; often there is a lack of perceived social disapproval of reference groups.

**Situational or environmental aspects on DUI/DUID.** Situations where driving is necessary, in combination with drug use in that same situation, often lead to DUI/DUID. At increased risk are, for example, heavy users or dependents driving under the influence for everyday purposes, but also social or leisure time users using alcohol or drugs at social places from which they have to depart afterwards (e.g. clearly identified increased risk for DUID when leaving parties, discos etc. to go home). Furthermore, truck or bus drivers also seem to be at increased risk due to the frequent use of stimulating drugs on-the-job. Other identified DUI/DUID supporting factors are restricted transport alternatives and the need for a car due to low opportunities of public transport, specific travel distances and a rural living environment. In addition to that, the actual detection chance of DUID is generally low. Finally, a rather separate factor influencing the decision to engage in DUI/DUID is related to the direct effect of the substance use in the situation itself. Alcohol myopia for instance refers to reduced information processing and decreased self-evaluation and risk assessment with increasing levels of intoxication.

**General personality, lifestyle and decision making characteristics related to DUI/DUID.** DUI/DUID can be related to personality traits like sensation seeking, extraversion, negative emotionality, deviance, social unconventionality, impulsivity and hostility/aggression. Some offenders are characterized by their generally risky lifestyle with also other problem/deviant behaviour. Specific decision making processes often lie at the basis of engaging in DUI/DUID. Lower (feelings of) behavioural self-control, lower self-efficacy, poor coping styles (coping with stressors, frustration, tension) and external locus of control are common. Many offenders seem to have a general difficult life constellation and/or suffer from acute emotional stress.

**Characteristics of DUI/DUID recidivists.** Even though the results of the recidivism review seem confounding regarding several aspects, most studies remain clear regarding the following risk factors:

1. Prior driving records: driving history is a variable often found to most strongly differentiate between those who will recidivate and those who will not. The higher the amount of prior records, the higher the recidivism risk;
2. Gender: males are of higher risk to drive under the influence of alcohol or drugs and they are of higher risk to re-offend;
3. Age: drug and alcohol re-offenders tend to be significantly younger at the first offence than those who do not re-offend;
4. Education: less educated drivers have a higher risk to be re-convicted for alcohol or drug driving offences.

It can be stated that special attention should be given to those drivers who combine multiple of the clearly identified risk factors, because according to all scientific knowledge the more risk factors an individual features, the higher the recidivism risk.

**DUI/DUID types and rehabilitation matching.** Interventions must be practical, in terms of costs and availability, and be related to consistently elicited DUI/DUID typologies. In addition though, the amount of alternatives must be kept to a reasonable number, when attempting to match the relevant characteristics of the different DUI/DUID types.

Regarding intervention programmes different studies revealed that certain types of offenders may profit more from certain types of interventions (in terms of mainly required approach (educational, psychological, therapy), long- vs. short term, etc.), e.g. offenders with clinical substance use disorders requiring more intense treatment or depressed mood offenders requiring interventions to modulate negative affects. Furthermore, the literature also provided indications that alcohol vs. drug impaired drivers, but also young drivers may require different focal points in the rehabilitation. The impact of problem awareness and motivation for change is also stressed as offenders can be in different stages of change which may require different rehabilitation approaches, which may be intercepted by flexibility in the rehabilitation execution.

### **Existing DUI/DUID assessment procedures**

**Multidisciplinary approach.** Medical and psychological examinations are the main professional fields mentioned with regard to assessment of DUI/DUID offenders. The medical examination of offenders essentially focuses on the subject of substance use disorders within a fitness to drive evaluation, while a psychological examination can provide essential information with regard to the psychological and social aspects related to clinical diagnoses. Psychologists can furthermore judge complications due to alcohol/drug dependency or abuse (like deficits of cognitive functions), can reveal the specific constellation of underlying factors that led to DUI/DUID and can thus indicate specific needs for rehabilitation of an offender.

**Country approaches.** The DUI/DUID offender assessments' criterion in the current European context varies depending on the specific legal regulations (like fitness to drive criteria) in each country. In some countries legally requested DUI/DUID assessments purely focus on detecting whether a clinical disorder lies at the basis of the DUI/DUID offence (e.g. in Belgium where the fitness to drive assessment is not linked to rehabilitation), while in other countries recidivism risk per se (even without an underlying pathological condition) is additionally considered in the frame of the fitness to drive decision (e.g. Austria, Germany). The country approaches vary widely regarding the link of DUI/DUID offender assessment and the assignment to DUI/DUID rehabilitation courses. Some countries do

show a direct link of both domains (e.g. Hungary) while other countries (e.g. Belgium) do not combine the fitness to drive assessment with a further assignment to a rehabilitation measure. Formal criteria to assign offenders for a fitness to drive assessment are generally existent (e.g. certain BAC criteria; license withdrawal) and some countries use similar formal legal criteria to assign offenders directly to DR (e.g. Austria). In some countries the result of a fitness to drive assessment always leads (e.g. Hungary) or may lead (e.g. Germany) to an assignment to DR. In for example Belgium and France no such strict legal assignment criteria or procedures for DR are specifically defined; here the assignment is rather individually determined (e.g. public prosecutor or judge proposal). Once legally assigned though it seems that often a differentiation is made between several types of legally provided DR, taking offender characteristics like drug type (alcohol versus illicit drugs), age, or severity of substance use problems etc. into account. The authors of the EU project ANDREA recommend a standardized screening/assessment procedure, before rehabilitation course participation, and so do the national guidelines of the examined oversee countries USA and Canada.

**Measures and tools.** Regarding the DUI/DUID assessment instruments, it has to be pointed out that a huge variety of tools which can provide relevant information on DUI/DUID offenders exist. Many of the tools used within fitness to drive assessment to detect the presence and/or effects of clinical disorders like substance abuse or dependency have originally been developed within a clinical setting. Additional tools being used in the scope of substance use assessment are laboratory tests that can tap biological markers of current and chronic use of certain substances. As by law clinical substance use disorders are contra-indications for driving, these tools are effective in fitness to drive decision making, but besides that, the derived information on the consumption patterns (very detailed in some tools) can guide the decision making on requirements for rehabilitation/treatment.

In general, the literature recommends using a combination of biochemical measures (biological markers) and self-reported screening or assessment measures to assess the consumption pattern of DUI offenders. On the one hand psychometric instruments on substance related disorders usually have higher specificity and sensitivity than laboratory tests in the detection of substance use disorders. On the other hand, self-reporting data depend on the willingness of the individual to acknowledge the severity of the substance use pattern. Particularly in the fitness to drive assessment of DUI/DUID offenders, where the individual is likely to be reluctant to admit his/her level of consumption or its adverse consequences, the use of biological markers and other objective facts such as for example prior offence records are advisable. Moreover, the pure awareness that someone's self-report is subject to corroboration by laboratory tests may also prompt higher levels of candour on the self-report measures.

Furthermore, as clinical disorders like substance dependency may lead to declined functional/cognitive capacities, performance tests can be used to evaluate whether an offender has sufficient capacities to drive safely. Such tools can be selected from the broad pool of general clinical/neuropsychological assessment, although based on traffic psychological research specific test batteries validated on the driver population, and fine-tuned to their specific problems, were developed. Traffic psychological research furthermore led to specific tools' development, based on the identification of the relevant psycho-social and personality related characteristics influencing and/or underlying all kinds of traffic related misbehaviour, including DUI/DUID. The focus of DUI/DUID traffic psychological assessments lies on evaluating the relevant performance and personality aspects underlying DUI/DUID and essentially on the change processes realized by an offender with regard to his/her attitudes, behaviour and lifestyle. Such evaluations allow giving a prognosis about recidivism risk in the scope of fitness to drive evaluations.

Screening/assessment tools always have to be seen as elements within a broader DUI/DUID assessment procedure, as no tool can function as a stand alone instrument to evaluate DUI/DUID offenders sufficiently. As an offender's permission to drive is at stake in a fitness to drive assessment, it is very important that the selected DUI/DUID screening/assessment procedure fulfils psychometric

standards, and it is recommended to combine several screening and assessment tools including also objective measures such as biological markers or prior offences. The importance of including a multidisciplinary approach covering medical, psychological and social aspects in order to suit the different dimensions of the DUI/DUID problematic and to be able to make a valid and reliable decision is emphasised.

Regarding the cost-efficient point of view, a DUI/DUID offender is first screened based on objective factors like the BAC or prior offences. As the country descriptions indicated, such rather strict group level assignment criteria are yet generally applied to refer to fitness to drive assessment and sometimes even to refer directly to DR. At this early stage the identified risk factors for recidivism could also be weighed. Low cost-intensive individual risk evaluations with for example short screening tools on substance use disorders shortly after the offence could also be considered for direct referring to a type of DR and/or for referring to more elaborate assessment. Those offenders identified as possible high-risk drivers could then be assessed in a more elaborate procedure.

Of course it is very important to take the context of an assessment into account, as it determines the selection of tools and the whole procedure. In contrast to the assignment/assessment for DR, the legal context of a fitness to drive decision is characterised by two major problems:

1. low validity of self-reported substance related problems in DUI/DUID subjects, as the DUI/DUID offender wants to escape further legal sanctions or consequences;
2. unacceptability of high chances of false positive diagnoses in the legal procedure. In the legal context of a fitness to drive decision, high chances of false positive outcomes are unacceptable. The withdrawal of a driving licence presents a curtailment of somebody's mobility, thus outcomes have to produce certain legal evidence, i.e. a high specificity is obligatory.

The importance of an integrative, thorough and comprehensive approach is thus more emphasized in the scope of a fitness to drive assessment as compared to an assessment/assignment only for DR referral. If a link exists between the fitness to drive assessment and the DR, the in-depth assessment results could indicate the needs for and form the assignment to rehabilitation. In case no link exists, and as assignment to a less adequate DR is less invasive – and may even be seen as a first step towards later more adequate assignment – a cost-efficient approach for assigning offenders to DR could be restricted to the evaluation of formal assignment criteria, taking also into account risk characteristics for recidivism, ideally additionally combined with cost-efficient screenings for the most relevant aspects (e.g. addiction or not).

### **Existing DUI/DUID rehabilitation measures: Rehabilitation of DUI offenders**

**Implementation and application.** Rehabilitation programmes for DUI offenders are based on a rather long term tradition in development and practical application in Europe. It is recognized on traffic safety expert level and numerous Member States have already established and realized this kind of intervention. Yet, as it has been established in the particular countries without mentioning any superordinated solutions (on EU level) so far, its way and level of integration into the particular national contexts regarding drink driving and licensing as well as its binding character (obligatory vs. voluntary participation) varies considerably between Member States.

Taking the situation outside Europe into account, it can be stated that driver rehabilitation is applied in all three states of concern. Regarding the USA, its implementation into the legal systems of different states is diverse. Nevertheless, high level organisations on traffic safety (NHTSA) and alcohol abuse (NIAAA) worked out recommendations which favour treatment as an addition of licence suspension or revocation.

In Australia, the situation is not uniform at all. While some territories/federal states have not implemented driver rehabilitation, others have, whereby in the latter participation is partly mandatory and partly voluntary.



Canada provides the most uniform picture on driver rehabilitation which can also be seen as a result of the long tradition in this area. Nowadays, being included into high level strategies on public health issues as well as on the reduction of impaired driving, the implementation of driver rehabilitation goes along with concrete recommendations and realization solutions for the entire group of drink driving offenders, addicts included. It is recommended that participation in driver rehabilitation should be a condition of licence reinstatement for an impaired driving offence.

**Programme access.** In Europe, different ways to enter a DR programme were found in Member States, ranging from the purely voluntary offender's decision over court recommendations or offers to participation based on a prior medical-psychological assessment in connection with the agreeing decision of the competent licensing authority or obligatory participation due to the BAC level at the offence. Thus, assignment or entering a programme can be a subjective decision either on the offenders' or the involved institutions' side, but can also be based on expert opinions or formal criteria. Outside Europe, both the US and Canadian high level organisations consider evaluation or screening/assessment as a necessary tool for a decision on an appropriate intervention or treatment. In Australia, assessment for alcohol dependence is mentioned.

**Principal rehabilitation approach.** Although some differences in the main focus of the rehabilitation concepts for DUI (more educational/counselling vs. more therapeutic) were found, a clear preference for approaches which combine informative/educative, psychological/therapeutic and group dynamic elements can be observed in Europe. The topics to be dealt with are not restricted to traffic issues, but rather extend to private, lifestyle or health issues. Initiating and realizing a change process requires personal involvement of the individuals of concern. The active participation of the offenders, stimulated and supported by highly professional course leaders with a (traffic-) psychological and/or therapeutic background, was observed as a decisive element of course success. Regarding the situation outside Europe, no uniform or general approach can be identified in the USA but rather different ones, such as self-help groups, educational programmes, in- and outpatient counselling programmes of varying intensity, victim impact panels, intense supervision programmes or treatment programmes in prison. Nevertheless NHTSA and NIAAA recommend that treatment should combine strategies of education, therapy and aftercare. In Australia, the interventions' approach is a more educational one with a rather short duration. In Canada, both educational and therapeutic activities, regardless of the programme's length, are recommended.

**Differentiation of programme types.** In Europe, it can be observed that in some Member States only one DR programme for all DUI offenders is applied, although alcohol addicts may be excluded by means of a prior assessment process. In other European countries specific programmes for certain kinds of DUI offender groups exist according to partly rather different criteria such as type of driver (inside or outside the licence on probation period), severity of the drink driving problem (repeat offenders), legal consequences of course participation, assessed severity of the alcohol problem itself or results of the medical psychological assessment. In general, no evidence for the superiority of one or the other differentiation was found.

Regarding the situation outside Europe, NHTSA and NIAAA in the USA recommend a more intense treatment with increasing problem severity. Health Canada provides more elaborated recommendations and points out the necessity of different types of interventions for different types of impaired offenders with at least two levels of interventions depending the substance consumption severity and related problems.

**Effectiveness of rehabilitation programmes.** The European standard group intervention programmes have good scientific evidence regarding reduction of recidivism and thus its direct relevance for traffic safety. An average reduction rate of 45.5% was observed which basically confirms

the ANDREA result of minus 50% recidivism. Nevertheless a rather broad variation in the reduction rates was found ranging from 15.4% up to 71.9%. This suggests that the success of individual standard group intervention programmes may differ considerably.

The evaluation results of other psychological intervention approaches in- and outside Europe, e.g. longer lasting group interventions or single measures, carried out on a voluntary base within the suspension period seem also promising. Some studies clearly reveal low recidivism rates although others show problems as lack of control groups, unpublished concrete recidivism numbers and different evaluation methods which made it difficult to calculate recidivism reduction rates for some of the selected studies. Many of them do show some impact on other criteria as mentioned below.

Effectiveness criteria besides recidivism show similar outcomes in the two distinguished intervention programme categories. European standard group interventions as well as further intervention approaches inside and outside Europe lead to changes related to knowledge on and sensitivity for alcohol specific impairments, increased problem awareness, less external attribution, influence on the motivation for change, safer attitudes towards drinking and driving, perspectives to avoid future DUI offences and positive participant feedback. Nevertheless, methodological limitations and weaknesses were observed in many studies, above all lack of control groups which reduces the value of the outcomes.

**Alcohol ignition interlock systems.** Ignition interlocks serve as structural interventions that control objectionable, unrequested behaviour as long as they are imposed, but achieve this without changing individual attitudes or behaviour in a long term. This is shown frequently by international studies, revealing low recidivism rates during the time of installation, but decreasing recidivism rates after de-installation of the devices. In addition to that the results of the European Alcolock Field Trial support the assumption that ignition interlocks are feasible and practical devices when applied to DUI offenders in combination with rehabilitation with a clear impact on the current DUI behaviour although no long-term effects were supposed to be studied. The outcomes of the Swedish part of the study in which the use of alcohol ignition interlocks was combined with strict medical supervision and regular check-ups are promising though as this programme resulted in a substantial reduction of the alcohol consumption among the ignition interlock users in a long term and the impact of the programme on traffic safety was reported to be high.

All results indicate that an ignition interlock use needs the offenders' motivation and readiness for change to be successful in a long-term. This must be supported at least by medical counselling or other psychological/psychotherapeutic interventions in order to result in a treatment process. The integration of ignition interlock devices in these rehabilitative measures may even be helpful as the recorded breath-test data can serve as behavioural evidences. Hypothetically, the records may even be used as a counselling tool in different ways. First of all, recorded breath-test data could serve as an objective feedback for the counsellor or therapist about the treatment progress. Secondly, it could be used to confront the client with hard facts (e.g. failed start attempts). Thirdly, regarding the fact that recent research indicates that it is possible to predict subsequent DUI behaviour with the data from the ignition interlock recorder the data could be used in order to shape the therapeutic intervention. As these conclusions about the value and usefulness of ignition interlock devices as concomitant features are still hypothetically drawn, the need for further controlled experimental research becomes obvious. Future studies, which focus on the assessment of the magnitude of improvement of rehabilitation programmes by a combined use of behavioural and technical measures, are necessary to gain information on the added value of ignition interlocks. As another traffic-safety-related issue, not only the effect of alcohol ignition interlocks on DUI recidivism, but also on secondary delinquency (DWS, driving while suspended) needs to be considered for further analysis.

### **Existing DUI/DUID rehabilitation measures: Rehabilitation of DUID offenders**

Compared to the findings on DUI rehabilitation programmes, very little information was found in the literature on rehabilitation programmes for DUID offenders, regardless if it concerns areas inside or outside Europe.

Yet, there are some relevant aspects to be considered: Rehabilitation programmes for DUID offenders were developed in Member States based on the experience with the DUI offender programmes, whereby the principal intervention approach was overtaken, i.e. the European standard group intervention concept. This approach is in line with the general recommendations provided by Health Canada (different types of remedial intervention for different types of DWI offenders, all programmes for convicted DWI offenders should incorporate educational and therapeutic activities).

Moreover, according to Health Canada, rehabilitation programmes for drug impaired drivers should also be part of the national countermeasure strategy against DWI. Thus, participation in a rehabilitation programmes should be considered as a possible prerequisite of licence reinstatement for DUID offenders as well.

### **Addiction treatment and options for dependent DUI/DUID offenders**

**Treatment of alcohol dependence.** As an integrative conclusion of the summary review and its underlying studies, meta-analysis and reviews, it can be stated that psychosocial treatments for alcohol dependence have been shown to be effective interventions to support the maintenance of abstinence and to lower the amount and frequency of alcohol and drug consumption. Considering the high variance of effect sizes and the comparatively high number of studies that failed to demonstrate significant treatment effects, this conclusion is not obvious from a primary perspective.

Taken together, treatment outcomes vary within a range of small and medium effects and thus may be relatively low in comparison to other fields of psychiatric treatment. In this context it should be considered that the low compliance of addicted patients to the treatment procedures and the high dropout rates usually generate a reduction in statistical power and thus impede the verification of treatment effects probably more than in most other kinds of psychiatric research. Even though it was shown that well-structured and manual-based therapies can double the chances to remain abstinent after alcohol detoxification. For the psychosocial treatment of drug dependence, the included reviews did not provide quantitative measures for therapeutic effects but conclude that the integrative treatment effects are positive.

The question, what psychosocial strategy to prefer, is not answered generally by current meta analysis and reviews. A variety of therapeutic approaches, each strategy focussing a specific subset of therapeutic targets, have been shown to be effective in treating alcohol and drug dependent patients if compared to non-treatment or waiting-list. By contrast, comparisons between different treatment strategies rarely produced significant effects.

Compared to other treatment strategies, several systematic literature analyses indicate a relatively high effectiveness of CBT, exceeding the effect sizes of other psychosocial approaches. Apart from the magnitude of treatment effects, it has to be considered that for CBT, the proof of effectiveness is based on a comprehensive and well controlled database. Its effectiveness is furthermore conclusive from a theoretical perspective as it simultaneously addresses multiple factors that contribute to the development and maintenance of dependence by e.g. modifying triggers and rein-forcers, by supporting alternative ways of relaxation and reinforcement and by developing skills to deal with risk situations, which prevent a lapse from turning into a relapse. Nevertheless, the database is not congruent. As other analyses placed other interventions on the first rank, it can be said that no treatment strategy has been shown to be superior in general. Thus, for the planning of treatment interventions, characteristics of the patient and the predominant symptoms of dependence should be taken into consideration rather than regarding selected approaches as the method of choice.

Alcohol dependent patients with a social environment that supports drinking (e.g. “drinking friends”) may benefit more from programmes that provide social support, patients with cue-elicited craving may profit more from CBT than others and for hazardous drinkers and problem drinkers BI and MI may already be sufficient to bring about a behaviour change.

Pharmacological strategies have been shown to produce an additional treatment benefit, but should only be used as an adjunctive approach to psychosocial therapy. For the treatment of alcohol dependence, consistent evidence was only available for two substances: The glutamate-antagonist Acamprosate and the opioid-antagonist Naltrexone. Both substances differ in their pharmacological properties and their mechanism of action. A meta-analysis based on published as well as unreported results pointed to specific therapeutic advantages of each drug: Acamprosate was shown to be the medication of choice if the goal is complete abstinence, whereas Naltrexone should be used to prevent excessive drinking in non-abstinent patients. Given that both drugs are available, discrepancies in efficacy profiles could be used for differential indications. Based on the assumption that: (a) different therapeutic goals are appropriate for different patients and (b) continuous abstinence is generally associated with the highest benefit in the treatment of alcohol dependence, patients who are motivated to achieve complete abstinence could be allocated to an abstinence-oriented treatment that uses Acamprosate, whereas patients with a long history of treatment failures and a low motivation for abstinence could be allocated to a harm-reduction treatment in which Naltrexone is used. In this way, individually allocating patients to treatments according to their motivational status could further enhance the effectiveness of treatments for alcohol dependence.

**Drug dependence.** For the relapse prevention therapy of drug dependence, different therapeutic approaches have been tested, but like in the field of alcohol addiction treatment, none of the therapeutic approaches has been shown to be superior in general. Thereby, many of the results shown for alcohol addiction treatment also apply to the treatment of drug dependence. CBT is based on the most profound and comprehensive database as it was equally shown for alcohol dependence. Contingency management approaches (CM), mainly used in the USA, have been restricted to the treatment of drug dependence. It was shown to be beneficial in reducing the use of illicit substances in opioid-, cocaine- and cannabis-dependent individuals as well as compliance with the treatment procedures.

While no medication has been found to date with clear-cut efficacy in the treatment of cocaine and cannabis dependence, significant effects have been shown for opioid substitution therapy in reducing illicit opioid use, in decreasing psychosocial morbidity and mortality as well as in improving overall health status and social functioning. The most used substances for heroin substitution, methadone and Buprenorphine, partly differ in their pharmacological properties, but the available clinical evidence does not clearly favour one of both drugs. Irrespective of the substance that is chosen for the opioid substitution treatment, sufficient doses have been provided in order to reduce craving and to suppress the use of street heroin. Besides the approach to substitute heroin by other opioids, heroin was prescribed in some studies. Because of the limitations in database as well as the strong heterogeneity of studies, the results concerning the prescription of heroin do not allow a final conclusion. Further studies are strongly necessary.

**Conclusions for the rehabilitation of dependent DUI/DUID offenders.** By EU legislation, alcohol or drug dependent patients are not considered as fit to drive (Directive 91/439/EEC). Accordingly, the main question concerning the conclusions of the summary review for the treatment of DUI/DUID offenders is how to particularly constitute DUI/DUID rehabilitation measures for dependent patients to keep the risk of drink and drugged driving offences low in this subgroup of offenders.

Until today, only very few studies are available which examine the effectiveness of drinking-related psychotherapeutic and psychosocial interventions in dependent DUI offenders in consideration of

drinking as well as driving related outcomes. There are first hints that alcohol-related interventions can be useful to simultaneously reduce the risk of drink offences as well as driving offences.

As the limited evidence does not allow general conclusions, the question of concern has to be answered from a rather theoretical position. Considering the nature of alcohol and drug dependence with its symptoms like craving and loss of control, it rather seems apparent that these factors limit the effectiveness of an exclusive application of driving-related interventions including information, education, short-term group interventions and legal sanctioning. Thus, for clients that use alcohol and drugs in an acute dependent way, addiction-specific approaches should be a constitutive element of treatment before getting the driving license back. This could be realized either by a) the allocation of alcohol or drug dependent DUI/DUID offenders to addiction treatments or b) the integration of addiction specific treatment strategies in the DUI/DUID rehabilitation treatment of alcohol or drug dependent DUI/DUID offenders.

Theoretically any psychosocial approach that was shown to be effective in the summary review can be chosen as the theoretical basis for the constitution of addiction specific measures. A combination of different approaches, as it is often used in clinical practice, provides the advantage to simultaneously address different factors and levels of influence. CBT offers a comprehensive treatment, including the modification of triggers and reinforcing consequences, the development of skills to deal with risk situations and to find alternative ways of coping with these risks. MI and BI can be used to increase the client's problem awareness and his intention to change and can thus be used to strengthen and maintain motivational processes at the beginning and during the course of treatment. 12-step programmes as realized e.g. by AA- or NA-meetings provide social support and help the patients to stay away from their former drinking and drug environment, which may especially be important in outpatient treatment settings or in the aftercare treatment of inpatient settings.

In addition to psychosocial approaches, pharmacological agents can be used as an adjunctive treatment. For the treatment of DUI offenders with alcohol dependence, Acamprosate is the medication of first choice, whereas Naltrexone was shown to be superior in preventing a lapse from becoming a relapse in controlled drinkers. While none of both substances implies a threat to traffic safety, there is conflicting evidence concerning the influence of opioid maintenance treatment on the driving aptitude. A major problem regarding substitution treatment and fitness to drive is additional consumption of psychoactive substances with substitution medication. It can be stated that drivers in substitution treatment should be considered as a specific group in the frame of DR measures.

Continuous abstinence is generally associated with the highest benefit in the treatment of alcohol and drug dependence and thus constitutes the primary aim in most addiction therapies, but it is only achieved by a certain proportion of patients. In the treatment of alcohol dependence abstinence rates vary between 33% - 60% one year after treatment. Even though with a lower magnitude than in the first year after treatment, abstinence rates keep on decreasing in the further course of time. For the treatment of drug dependence, abstinence rates are often far below. Thus, in situations of a driver with a former history of alcohol or drug addiction, whose licence was renewed, relapses to drinking have to be taken into consideration. As a relapse to DUI/DUID after excessive drinking episodes or drug taking can not be excluded in a long-term perspective, even after the successful complementation of addiction therapy, addiction treatment strategies in dependent DUI/DUID offenders need to be applied only in combination with driving related strategies. If realized, the combination of both types of interventions would represent a two-step-approach, in which the first step (addiction treatment) aims to prevent a relapse to any drinking/drug taking or excessive drinking/drug taking, while the second step (DUI/DUID rehabilitation) specifically focuses on the topic of intoxicated driving. It aims at increasing and further strengthening the abstinence based on the importance of the driving license for private and professional life. This could also imply to motivate the offender to look for additional professional help. Vice versa, increased therapeutic benefits may be expected from an integration of DUI/DUID rehabilitation elements into addiction treatment, drinking- / drug taking- related interventions into DUI/DUID rehabilitation. As MI has been shown to provide effective measures to promote a behaviour

change in non-addicted clients by exploring and resolving ambivalence, the method could simultaneously be used for driving as well as drinking-related aims of the programme: a) to promote the awareness of the negative effects of drinking and drug taking and to enhance the intrinsic motivation for a reduction in alcohol or drug consumption and b) to increase the awareness about the consequences associated with DUI and to raise and strengthen the client's motivation to refrain from alcohol and drug impaired driving. This applies equally to other therapies like CBT, which can be used to identify drinking triggers as well as drinking-driving cues and to develop strategies to diminish and avoid both situations. A combination of different approaches including medical treatment, drinking-related as well as driving-related elements is recommended: Some education, some psychotherapy and some follow-up in the sense of probation may be the most effective type of intervention as it provides "something for everyone" as regards the problem group.

Finally, further research is necessary to test the transferability of therapeutic strategies developed for the treatment of alcohol and drug dependence to the rehabilitation treatment of addicted as well as non-addicted DUI/DUID offenders. The generalizability of the results obtained in the field of addiction treatment to DUI/DUID rehabilitation programmes may be limited by situational differences like frame conditions, the client's motivation to participate and the voluntariness of the rehabilitation measures. Furthermore, differential effects on drinking-related and driving-related outcomes have to be taken into consideration. Different treatment strategies like CBT or MI can provide a theoretical framework for the deduction of treatment strategies not only to reduce drinking, but also to lower the risk of driving when impaired by alcohol or drugs.

## 2.1.2 Results of provider questionnaire survey

47 providers from 12 European countries (Austria, Belgium, France, Germany, Hungary, Italy, the Netherlands, Poland, Portugal, Sweden, Switzerland, United Kingdom) responded to the questionnaire on organisational/structural, programme and prior driver assessment related issued in DR.

### Realization of DUI/DUID driver rehabilitation in Europe

DR providers are mainly non-governmental, private organisations. 87 DR programmes were announced, thereby 53 for DUI offenders, 21 for DUID offenders and 13 for mixed groups (DUI/DUID/other traffic offenders). All 12 European countries offer programmes for DUI offenders, but only four Member States (Austria, Belgium, Germany, and Portugal) for DUID offenders. 1.431 persons, mainly psychologists with further education are working as trainers/course leaders. The vast majority of DR providers do not offer treatment programmes for addicts. The participation fee for the DR courses is mostly paid by the offenders. Half of the providers report to have a quality assurance system, yet mainly not according to international, national or European standards but to intra-organisational criteria (this issue is analyzed in detail in WP5.2.2 (Analysis of existing quality management systems in driver rehabilitation) which is not finished yet.

### Issues related to the provided DR programmes

**Legal frame.** Participation in DR programmes is often legally regulated, mainly by the licensing authorities and to a less degree also by courts. Thereby, participation is not always obligatory, about half of the programmes are voluntary ones. The consequences of participation are mostly linked to licensing (re-licensing, licence reinstatement, reduction of suspension periods, ongoing validity of licence), but also to a penalty point system, to an upcoming driver assessment or to criminal prosecution.

**Programme concept, operation and evaluation.** The overwhelming number of programmes was developed within the providing organizations. The programmes are more or less specific as they mostly focus on DUI or DUID without further differentiations between additional subgroups. A mixture either between these two problem groups or with other traffic offender groups is less frequent.

Addiction and language problems are reported as the most frequent reasons for excluding offenders from a DR programme. The vast majority of programmes are principally designed as a group intervention, but the number of participants varies considerably. Moreover, nearly all programmes have exclusion criteria for participants either before or during the course. The reasons in the first case are above all addiction and communication problems, and in the latter case acute substance intoxication by alcohol or drugs. Rather big differences can be observed regarding the duration and intensity of intervention.

Regarding specific DR services, language is the most frequent considered aspect (about one third of the providers) while gender, age and cultural background are no important criteria. In general, exclusion criteria before and during course operation exist.

The programmes' concepts are by far predominantly treatment (psychological/therapeutic), followed by the educational approach. According to the providers the most important success factors are self-observation and -reflection, discussion and confrontation, development of alternative, new behaviour and an open and trustworthy climate. In the second place are emotional experiencing and involvement, goal setting and commitment to stick to them as well as achievement of behavioural goals/self-control. Information is less important. Alcohol or drug screening is even of minor importance. Medical treatment or alcohol ignition interlocks are of nearly no importance.

Most of the documented programmes have already been evaluated, whereby participant feedback is the predominant approach. Content evaluation, process evaluation and outcome evaluation are less frequently conducted.

### **Prior driver assessment or diagnostic screening**

Fifteen providers in seven countries indicated to apply driver assessment or diagnostic screening prior to the DR within their organisation. Seven providers in three countries report that such driver assessments are carried out outside their organisation. For both, DUI and DUID, the assessment approach is mainly psychological, most frequently carried out by psychologists, although medical examinations are conducted as well. Psychologists are the most frequent professional group involved. Interviews are most frequently conducted to assign both groups, but especially DUI offenders, to rehabilitation. Objective measurements regarding substance use disorders (physical examination, external medical/therapeutic information, biological markers, screening tools of substance use and functional/performance testing) are applied in some organizations as well. Personality testing as well as practical driving tests are of nearly no importance in this scope.

## **2.1.3 Resulting decision criteria for good practice**

Based on the literature analysis and the provider survey the following preliminary decision criteria on DR procedures for DUI/DUID in Europe which will serve as input for WP5.2 on best practices can be deduced:

### **Implementation of DR in Europe**

DR measures should be an integrated part of a comprehensive countermeasure system.

Participation in DR measures should be legally regulated.

DR measures should be provided for DUI as well as for DUID offenders, although the scientific evidence regarding the latter group still has to be improved.

Regulations on DR participation should care for an early access of the offenders to specific measures in order to minimize the risk of problem escalation and secondary delinquency.

As traffic safety is widely accepted as one of the major public health concerns DR should be connected to the health care system.

To assure the best and most appropriate measure for all types of offenders, DR providers should be integrated into a knowledge network with addiction treatment providers and specialists.

### **Types of DUI/DUID**

DUI/DUID offenders are a heterogeneous group and there is general agreement on the relevance of identifying various types of DUI/DUID offenders with regard to their different needs and opportunities for rehabilitation. Two groups, namely non-addicts and addicts should minimally be distinguished as they require different interventions or treatments.

A pool of programmes should be offered matching with the specific offender needs in order to gain optimal effectiveness of rehabilitation. At least, interventions or programmes for four different types or groups should be available: DUI addicts and non-addicts, DUID addicts and non-addicts. The majority of the European programmes already differentiate between DUI and DUID offenders, and addiction is a very common exclusion criterion for the European DR programmes.

The literature furthermore suggests that young drivers and recidivists may require different points to focus on in the DR. About one fifth of the current EU programmes take such aspects into consideration.

Ideally DR services should be available for all DUI/DUID offender groups; e.g. special programmes/treatments for non-addicted recidivists. With regard to individual conditions, special services, e.g. operation of programmes in different languages or exceptions from the normal procedure should be possible.

Drivers in substitution treatment should be considered as a separate group in the frame of DR Measures

### **Assessment prior to DR**

Driver assessment is necessary to identify addicts in order to assign them to adequate intervention.

In a cost-effective approach DUI/DUID offenders should shortly after the offence be screened based on objective factors like the BAC or prior offences. Additional information regarding the substance use problem severity could be gathered by the use of short screening devices.

DUI/DUID offenders identified as high-risk drivers should afterwards be assessed in a more elaborated procedure.

A wide range of screening and assessment measures exist. Many are not evaluated on the DUI/DUID population, as they were developed and applied for clinical diagnoses. Traffic psychological assessment tools are very fine-tuned to the specific problems of DUI/DUID offenders and are often validated on this population.

An in-depth psychological investigation of DUI/DUID offender characteristics can provide important information on underlying aspects of DUI/DUID, and thus help to identify specific rehabilitation needs.

The aims of a fitness to drive assessment versus an assessment purely to assign to a DR differ. The consequences of the first are much more life-invasive because the permission to drive, and thus an important part of the mobility, is at stake. Therefore the needs for comprehensiveness, thoroughness, and an integrative approach are clearly stricter for fitness to drive assessments. As assignment to the not most adequate rehabilitation is less invasive or harming, formal assignment criteria, which can take into account risk factors for recidivism, can be a minimal or first step. Short screenings focussing on the most relevant needs (like addiction or not) could provide additional valuable information. In the most ideal situation though – for the most fine-tuned rehabilitation assignment – a link exists between the fitness to drive assessment, which is in general more elaborated, and the rehabilitation assignment. Looking at the current situation in Europe, about 30% of the providers indicate that some kind of assessment prior to the DR is performed within their organisation. Further investigation is



required though to analyse the exact scope of these assessments/screenings. Formal assignment criteria are indicated in nearly all programmes (e.g. BAC).

In general DUI/DUID assessment should be carried out close in time to the offence.

### **Courses and treatments**

DR courses for offenders without substance use disorders can follow the good practice example of the European standard group interventions' concept.

Psychological and therapeutic approaches with educative elements are the most promising ones.

DUI, DUID and other traffic offenders should not be mixed in the courses.

Offenders with a more severe problem behaviour, above all recidivists or heavy consumers with a substance use problem should be treated more intensely.

Motivational aspects should be considered, e.g. course participation leading to a reduction of the suspension period.

For clients using alcohol and drugs in a dependent way, addiction-specific approaches should be a constitutive element of treatment. This could be realized either by: a) allocation of alcohol or drug dependent DUI/DUID offenders to addiction treatments or b) integration of addiction specific treatment strategies in the DUI/DUID rehabilitation treatment of alcohol or drug dependent DUI/DUID offenders.

In general, the state of the art reveals that DR is an established intervention in about half of the European member states focussing on non-dependent DUI offenders. Thereby the necessary organisational and personal infrastructure as well as numerous programmes exists for carrying out this intervention on a day-to-day basis. Non-dependent DUID offenders can be integrated easily into this available structure. The deficit of appropriate programmes for dependent DUI/DUID shows the need for future development of concepts, evaluation of these and provision of staff which is experienced and well educated in addiction treatment in order to care for a sufficient supply for all offender groups.

## ***2.2 Good practice: In-depth Analysis on Reasons for Recidivism & Analysis of Change Process and Components in Driver Rehabilitation Courses***

### **2.2.1 Main results of in-depth study on recidivism reasons**

The exploratory study on recidivism reasons aims at improving the knowledge on contributing factors to DUI recidivism in spite of having participated in an appropriate DR course for this problem group.

#### **Study design and sample**

From a data pool of 7.011 DUI offenders with a BAC of 1.6 ‰ or more having carried out driver assessment at the KfV and having participated in a DR course in Austria, n=303 recidivists were identified who have participated in a DR course for a second time due to a new DUI offence in time period of about five years (January 2002 – September 2007) at the KfV. They were compared with a matched control group of n=303 non-recidivists (i.e. drivers with a BAC of 1.6 ‰ or more but only one DR course participation in the defined time frame). In a case-control design recidivists and non-recidivists were compared regarding their outcomes in driver assessment as this is an obligatory measure for all DUI offenders with a BAC of 1.6 ‰ or more in the course of their reinstatement of driving license in Austria.

#### **Risk profile of DUI recidivists (non-successful first-time DR course participants)**

Based on the driver assessment data including traffic relevant performance and personality tests as well as a comprehensive explorative interview carried out by an authorized traffic psychologist the following risk profile of DUI re-offenders who did not profit (enough) from the (first) DR course can be deduced:

- Having high BAC levels at the current offence or refusing the breath test;
- Having additional prior drink-driving or already several DUI offences (i.e. not the first one) and consequently having longer suspension periods of driving licence;
- Having a habitual drinking pattern in the past and in spite of past or current abstinence periods having an increased alcohol tolerance, thus having also felt less impaired at the actual DUI offence;
- Denying or not having any alcohol related health problems, being a smoker and being less aware of own health issues;
- Showing a more unrealistic self-perception and less self-reflection whereby alcohol related risks in traffic are underestimated;
- Not living in a partnership;
- Being assessed as having an enhanced re-offence risk by a qualified expert (traffic psychologist).

## **2.2.2 Main results of analysis of change process and components in driver rehabilitation courses**

This study aims at getting insight into the change process caused by DR (driver rehabilitation) courses and its main elements whereby the sub-group of recidivists was considered as well. Additionally, an overall participant feedback was included.

### **Study design and sample**

A questionnaire was developed based on a theoretical framework, above all the well known and scientifically proven TTM (Transtheoretical Model of Change from Prochaska & DiClemente, 1984; Prochaska et al., 1992, 1997), supplemented by the Diamond of Change (created by the WP5.2 research team) which specifically considers the key elements contributing to a change in DR courses. This allows a one-time data collection, namely at the end of the DR intervention. DUI (drink-driving) and DUID (drug-driving) offenders were included.

In a prospective cohort design a questionnaire survey was carried out in nine Member States (Austria, Belgium, France, Germany, Great Britain, Hungary, Italy, the Netherlands, Poland) resulting in a total sample of n=7889; thereof n=7339 were DUI and n=550 were DUID offenders.

### **Results on TTM stages and processes**

Most course participants of both, DUI and DUID offenders, went through the entire stages and processes necessary for change according to the TTM (Transtheoretical Model of Change) successfully. This means that the attendees' awareness of their problem behaviour regarding drink-driving or drug-driving was established or increased, that they started to think about this problem more deeply taking the pros and cons of changing into account. Due to these cognitive-affective self reflection processes taking place during the DR course in a group setting thus taking the position, experiences, feelings and thoughts of the other course participants into account as well, their motivation and willingness to behavioural change increased. As a consequence, concrete plans to take actions in the immediate future or first efforts to change were made. Along with the duration of the

course participants' initial intention to change was actively transformed into action and already established behavioural changes were strengthened. Course participants even reached the final maintenance stage which is important for holding up the achieved change and prevent relapse to an earlier stage. These outcomes result from the attendees' assessments as regards the scales consciousness raising, dramatic relief, environmental re-evaluation, self re-evaluation, social liberation, self-liberation, stimulus control and counter conditioning, helping relations and reinforcement management. It is important to mention that having reached above all the behavioural change processes, but also the cognitive affective ones was strongly confirmed by the participants of the DR courses.

As regards recidivists, i.e. prior DUI offences and repeated DUI course participation, it was found that in general both sub-groups were also able to proceed successfully through all TTM stages and processes of change. Although the differences to non-recidivists are small, course participants with prior drink-driving convictions tend to having become more aware of and insight on an emotional and rational level of how the problem behaviour affects not only the self and self-perception but also the physical and social environment and further to be better in the position to substitute the problem behaviour for an alternative, new behaviour as the results in the corresponding TTM scales self-re-evaluation, environmental re-evaluation and counter-conditioning reveal.

DUI offenders with prior course participation only tend to show slightly better results in the last stage of change dimension, namely reinforcement management, meaning that they better developed self-rewarding strategies in order to keep in the behavioural than non-course repeater.

### **Results on Diamond of Change key elements**

Both, DUI and DUID offenders confirmed the importance of all five key elements in this type of intervention as postulated by the Diamond of Change. Thereby, above all the participant-trainer relation, but also the other components, namely the individual, the methods, the contents and the participant-participant relation are the driving forces for change. As the duration of the DR courses which had been evaluated is restricted to a few weeks only, it is important to use these different elements simultaneously. This concept and general approach has been proven to be adequate for the target groups according to their own assessments.

DUI recidivists confirmed the high value of all key element of change as well. But while course repeaters do not show any differences in the Diamond of Change compared to non-repeaters, the sub-group of drivers with prior DUI offences tend to judge the individual, but also the method to be more important change factors than those drivers without prior DUI convictions.

### **Results on overall course evaluation**

Both target groups evaluate the entire DR course in a very positive way. About 95% of all European the DUI offenders who participated in this feedback study assess the DR course as good or very good. Only about 2% rate the course as bad or very bad (about 3% are missing data). About 90% of the DUID offenders judge the entire DR course as good or very good. Only about 6% assess the intervention as bad or very bad (about 4% are missing data). These outcomes again confirm the adequacy of this kind of intervention for drivers having had an offence due to drink-driving or drug-driving.

Both recidivist sub-groups do not differ in their positive to very positive overall assessments of the entire DR course from non-recidivists.

### **Results on further differences and similarities of DUI and DUID course participants**

Although DR courses for DUID offenders could not be analysed on that broader scale like DUI attendees (as only Germany was in the position to provide considerable numbers within the limited time frame of data collection), some socio-demographic and offence related differences became obvious:

Both target groups differ highly in age, as DUID course participants are about 10 years younger in average than DUI offenders.

Both target groups differ highly concerning their accident involvement at the offence, which led to the course participation, too. 24% of the DUI course participants had an accident compared to only 6% in the DUID group.

Similar in both groups is the fact that either DUI or DUID course participants are predominantly male. Regarding the level of intoxication, respectively the kind of detected illegal drugs, the data reveal averaged BAC levels of 1.4 ‰ for the DUI course participants in the total European sample. The predominant substance while driving under the influence was cannabis (about 80%), followed by amphetamines/ecstasy/cocaine (about 40%), while heroine and LSD are of no major importance (about 4% totalized).

Recidivists differ in age (considerably older) and gender (more males) as well as regarding their BAC-level (higher especially drivers with prior DR courses) compared to non-recidivists. Accident involvement is rather similar than that of non-recidivists.

In sum, the study on the process and components of change in driver rehabilitation courses, supplemented by an overall participant feedback and considering recidivists as well indicate that the DR programmes applied in several Member States for certain groups of substance impaired drivers at present led to very positive outcomes. The specific course concept (psychological-psychotherapeutic with educational elements carried out in a group setting) provides the key elements of change (individual, method, content, participant-participant relationship, trainer-participant relationship) which led to reaching/passing the necessary stages and processes of change. Thereby, the DR courses are strongly focussing on cognitive-affective but especially on behavioural changes that are necessary for preventing new DUI or DUID convictions in traffic. Moreover, the positive to very positive overall feedback indicates that the DR course could meet the expectations and needs of most of the course participants. Initiating and/or motivating/strengthening change is confirmed by recidivists as well after having passed their second course. Nevertheless, it has to be said that the focus of the study at hand was the analysis of the change process and its key elements. Thus, no direct conclusion can be drawn from a positive course evaluation to not having recidivism.

### **2.2.3 Implications for good practice criteria**

Based on the results of both empirical studies the following practical implications regarding DR can be drawn:

- DUI recidivists differ in several aspects from non-recidivists which influence their readiness to change. This enhanced recidivism risk can be identified in the course of driver assessment.
- In principal, DR courses can be an adequate measure for recidivists as well as they can profit from a second course in the same extent than non-recidivists.
- An assignment procedure for certain high risk recidivism groups (e.g. DUI drivers with a re-offence in a defined time period, DUI drivers with a very high BAC at the first offence) can clarify the adequate DR intervention. This can be done in the course of driver assessment.
- DR courses can target on DUI and DUID offenders. Yet, the matching of both target groups in one and the same DR intervention should be avoided as they do not only differ regarding the

drug and its legality/illegality but also in relevant socio-demographic and offence related aspects.

- The psychological/psychotherapeutic/educative intervention concept, carried out in a group setting within this study and lead by a specially qualified trainer with psychological background seems to be adequate for DR courses.
- No gender specific DR courses are necessary as both males and females can profit from this intervention, although the vast majority of DR course participants are male. Specific courses according to further socio-demographic variables, e.g. age, do not seem necessary as well.
- DR courses can be applied throughout Europe as this measure was very positively evaluated across different Member States and due to the similar change effects obtained despite more or less differences of assignment and realization of this measure in single European countries.

## 3 Evaluation of previous WP5 results with different target groups

### 3.1 *Expert Workshop on Driver Rehabilitation*

The expert workshop aimed at including the feedback of field experts in DR regarding the research topics covered in WP5. Therefore, the concept of this meeting was to present the investigations in Task 1 (State of the art) and in Task 2 (Good practice) carried out until then, to discuss the results with them and to give the attendees the possibility to make remarks on the outcomes and/or to mention additional DR issues.

#### 3.1.1 Organisation and realisation of the expert workshop

Target group of the expert workshop were those DR providers which participated in the provider questionnaire survey and/or the analysis of change study as well as those experts who actively contributed to the realization of the study in their country (see invitation in Annex).

The workshop programme was established according to the above mentioned concept, i.e. presentations on all WP5 research activities and its preliminary results were given including an overview on the entire DRUID project in general and on WP5 in special (see programme in Annex). As the presentations of the WP5 investigations given at the expert workshop are very similar to those given at the WP5 symposium (see 3.2) the corresponding files are only to be found once in the Annex, namely of the later conducted symposium. The introductory presentations about DRUID project in general and the WP5 in special are not included in the annex as they give just a general overview on the entire project respectively the specific project part.

In order to document the contributions of the participating providers, one WP5 team member took the minutes during the discussions.

The workshop was organized by the WP5 partner BAST and took place in their facilities in Bergisch Gladbach, Germany on Friday, 29<sup>th</sup> February 2008.

#### 3.1.2 Minutes of expert workshop

The minutes contain the main issues discussed at this workshop (detailed documentation can be found in the annex).

Based on this the following summary can be given:

- The result that recidivist offenders are of young age was discussed as the practice shows a rather higher age of recidivists compared to other offenders. It would be interesting to compare the results on the age issue of recidivists of the literature review with information from the practice (e.g. result of the in-depth analysis on recidivism).
- It is important to pay attention to the exact definitions used in the study, as for example categories like “young”, “old” or “high education” might be understood differently.
- EU best practice recommendations on DR have to bear in mind the different national legal system. Recommendations on the legal framework of DR may be necessary. The results of DRUID WP5 should be taken into account in WP 6.
- Providers in Europe have little experiences with ignition interlock systems. Only France, Belgium and Sweden have (at least some) experience with Alcolock systems.

- The Belgian study showed that ignition interlock systems help the offender to control his/her behaviours. Thus, they might be a good option for certain types of DUI offenders (e.g. offenders with a serious alcohol problem). Main advantage of these systems is that the offender can stay mobile. Practical problems connected to the implementation of ignition interlock systems were observed in the Belgium study. The French study showed, that the financial question also needed to be answered, because if the offender has to pay it by him/herself, this kind of system would be limited to the more wealthy DUI offenders.
- Ignition interlock systems are very popular among politicians and thus, psychologists should not ignore this topic.
- Ignition interlock systems should be used in combination with DR. Some psychologists fear that interlock systems might be contra-productive to traditional Rehabilitation aims (e.g. self-evaluation, self-confidence). More study is needed to evaluate the long term effects and the added value of these systems in combination with DR. Furthermore, the information on the Alcolock recorder has the advantage that it does not rely on self-reported data, which might be used as feedback during the DR programme or for predicting the recidivism risk.
- Regarding the questionnaire on the change process in DR courses, some questions were difficult to answer for the participants, and the fine-tuned meaning of the item was not always understood. We should pay attention to this in the interpretation of the results and maybe concentrate on answers with higher variations.
- There are national differences in the traditional order of answering scales (e.g. FR), but this did not seem to have influenced the results. Moreover, pre-tests had been carried out to identify difficulties.
- Due to the answering format, the trainer did not see the responses of the course participants.
- No long-term effects can be drawn from this feedback study on the change process.
- The study on recidivism but also the literature analysis shows that the number of female recidivists is small.
- The sense and definition of refusing a breath test was not clear. In Austria at present, a refusal is considered equal to driving under the influence of alcohol with a BAC higher than 1.6‰; a breath test which fails to be valid after the fifth attempt is regarded as a refusal (AT).
- The term QM led to misunderstandings as the Dutch provider did not label its elaborated system of internal “monitoring” as QM.
- The analysis group splitting of voluntary and non voluntary programmes based on the course has to be rechecked, as some courses include both groups.
- In the provider survey the terms within the question on legal entity of the organisation (provider survey) caused misunderstandings and definition difficulties.
- The providers thought that it was very important to publish the results of this study and the DRUID WP5 team promised to ask the EU Commission for permission to do so.
- The dissemination of the results (providers’ survey) to the participating providers was considered to be of high importance. One of the next steps of the DRUID WP5 team should be to ask the EU Commission for this permission.
- It was suggested that WP5 team should recommend installing a European platform for exchanging information on DR.

### **3.2 *Symposium on driver rehabilitation programmes***

The symposium on driver rehabilitation programmes had the following aims:

- Providing information about DR issues based on the WP5 research in a country without DR experience to interested national experts from related fields to DR;
- Identifying the specific needs of such a country in case of introducing such kind of measure in future.

The principle concept of the symposium regarded the presentation of the WP5 outcomes reached so far, including an overview on the entire DRUID project as well as on the WP5 research activities, which was the same as in the expert workshop (see 3.1). Additionally, the symposium should provide the possibility for presentations of national experts.

### 3.2.1 Organisation and realisation of the symposium

Target group of the symposium were national experts (e.g. driving school instructors, national traffic safety experts, addiction experts) who might be interested in getting information about DR (see invitation in Annex).

The workshop programme was established according to the concept mentioned above. The programme and the files of all content related presentations can be found in the Annex.

The workshop was organized by the WP5 partner CERTH/HIT and held in its facilities in Thessaloniki on Friday, 16<sup>th</sup> May 2008.

### 3.2.2 Minutes of symposium

The minutes contain the main issues discussed at the symposium (detailed documentation can be found in the annex).

Based on the discussions the following summary can be given:

- Low percentages of female DUI/DUID offenders are common in general, but in some Member States the rate is even very low due to different drink driving patterns or gender specific differences in sentencing to prison.
- The hypothesis that heavier consequences of the DUI/DUID offence (e.g. involvement in an accident) contribute to a higher change motivation does not count.
- The effectiveness of bringing an 'external' victim into the DR group setting is considered low. The DR as a group process should rather focus on the exchange of information and experiences within the group in order to reach personal involvement.
- Victim impact panels have a little bit more effect on female offenders but in general have low effect sizes.
- As the amount of time for DR is limited the focus should mainly lie on guiding positive changes in individual lifestyle instead of confronting the offender with the consequences of one's misbehaviour.
- For the main group of offenders short term DR running over some weeks is sufficient, but for a small group of high risk offenders long term interventions are required.
- In order to change, a certain state of mind is required and in some cases this may not be reached after one course.
- DR starts from the individual situation and works on the individual motivations.
- Assessment of offenders can indicate individual DR needs. Addicts and non-addicts require different interventions and should be differentiated.
- BAC level formulas are shown in DR but are not often used by offenders and are thus less important for the change process. The DR focus mainly lies on psychological changing processes, including not only to think about strategies to avoid drink driving but, very importantly, also on aspects like awareness rising of the effects of general drinking related lifestyle, which requires a more therapeutic approach.
- DUI offenders are in general no addicts, but a lot are misusers. DR can help offenders with heavy substance use problems to motivate them to stop drinking at all or to guide them in their thinking process that treatment may be necessary which can lead to earlier treatment in practice. Driver



assessment prior to DR makes it possible to clarify the treatment needs for rehabilitation of these offenders so that proper assignment can be done.

- Participants in DR should be sober as part of the intervention; not being sober leads to exclusion from the DR.
- Political/legislative and training barriers impede general drug rehabilitation in Greece. There is no legislative framework for DR as there is a lack of political support. DRUID in general and WP5 in special should provide a basis to sensitise and raise the decision maker's awareness for the necessity of effective interventions of substance impaired offenders.
- The Greek situation at present is not acceptable. Offenders go to court where an expert judges whether the offender is addicted or not. In case of addiction, the sentence is to go to an institute that houses addicts but this does not exist in Greece, so the offenders can just continue. The law does not provide education or treatment measures for offenders.
- In case of DUI offences the new traffic law in Greece only foresees a fine or in the worst cases points being taken away from the driving license.
- Persons using methadone in Greece mostly do not have a driving license but they do drive.
- Concern was expressed by a Greek participant with regard to the introduction of DR. The specific mentality should be considered which might imply different focus points in DR.
- Preventive measures on DUI/DUID are just as important as rehabilitative measures after an offence. It is stressed that an integrated approach against DUI/DUID is required, and that the costs of all these measures remain low as compared to the costs in case of accidents.
- It is clarified that the costs of DR for the society do not have to be too high as in most countries offenders have to pay for the DR themselves.

## 4 Review on existing evaluation tools

In addition to the information from the WP5 research a review on existing evaluation tools was carried out. The primary aim of this review was to get information not only about user friendly evaluation methods and approaches but also about evaluation contents and processes that were used in other projects in order to identify good practice. It was assumed that this information would give ideas for the development of the evaluation tool within WP 5.

### 4.1 *Evaluation methods for product assessment*

A rather broad internet search was carried out in order to identify evaluation tools which are used for product or services evaluation.

The results show that evaluation instruments are available for a wide range of topics: safety of cars (Euro NCAP), air or food quality, quality of electronic devices like cameras, navigation systems, consumer services or trade tools, like e-bay or “Konsument” (the Austrian consumer journal for product quality).

Mostly, the evaluation tools consist of several content related categories, which characterize the product to be assessed. The user has the possibility to judge the products according to these categories by means of marking systems. The marking systems themselves comprise several categories indicating the extent of agreement to, satisfaction with or fulfilment of the corresponding product categories. This is either be done by using symbols (e.g. stars – one up to five ones; or plus – zero - minus with one up to three plus) or by using verbalisations (very good, good, satisfactory, less satisfactory, not satisfactory). Often, an overall evaluation result is displayed whereby verbal and/or non-verbal modes are used.

### 4.2 *Evaluation instruments applied in EU projects on road traffic safety issues*

Evaluation schemes were also developed or applied in EU-projects in order to estimate performances, e.g. for different traffic safety measures. In the past, two projects on road safety issues dealt with identifying good or best practices and established evaluation tools for this purpose.

#### 4.2.1 **EU project ROSE 25**

The EU project ROSE 25 (Inventory and Compiling of a European Good Practice Guide on Road Safety Education Targeted at Young People, 2005) dealt with road safety measures for children and teenagers (till the age of 18 years) resulting in European guidelines for best practice.

The project covered different types of measures: actions, which targeted to influence attitudes or behaviour, media for children and teenagers (used on a regular level) and road safety education (RSE) structures in the single European Member States (if road safety is embedded in the school context, etc.).

ROSE 25 used a two step evaluation system:

- At first, relevant measures for the further analyses process were identified;
- At second, the nominated measures were evaluated according to defined criteria.

The following evaluation criteria were developed by the research team in order to select RSE measures on country level:

- Actions should include face-to-face contact with the target group and media should not be stand-alone products,
- Current actions should include several modules, i.e. not just one-off events; in the case of media, priority should be given to regular TV/radio programmes and interactive websites,
- Actions should show broad embeddedness, either in other road safety measures such as engineering or enforcement, or in the sense of broad visibility and dissemination,
- Involvement of several partners, i.e. interventions based on a broad network,
- Easiness to duplicate the measure,
- Furthermore, a set of general points, such as clear-cut concepts of actions and media design should be attractive, innovative and adequate for the age groups targeted.

Based on these criteria the country experts gathered measures in different areas (e.g. for pedestrians, cyclists, car passengers, passengers of public transport, pre divers) for the target group of young people and teens by means of a questionnaire survey.

The next evaluation step started with the establishment of the following criteria for the assessment process by the ROSE 25 core research group (ROSE 25, 2005, p. 4):

- Is there a balanced approach including three main elements, i.e. building knowledge, transferring skills and leading to changes in attitudes,
- Are there quality standards regarding information and instructors,
- Is there an easy access to intervention,
- Timing and exposure,
- Results from evaluation studies.

The critical issue in this phase was the establishment of a common understanding of these criteria by all the evaluating experts. As a result of this process of discussing and opinion converging, good practice was defined as:

- Include theoretical and practical elements
- Focus on knowledge, skills and attitudes
- Be attractive to the target group, i.e. raise their interest and create fun
- Be embedded in other road safety measures (referring to the 3 E's)
- Be embedded in a wider context in school
- Be based on broad partnerships, create a network and be attached to or establish a broader platform
- Be easy to duplicate;




And additionally

- Quality information for instructors, quality of the communication skills of the instructor;
- The accessibility of information for the person implementing the action;
- The exposure of the target group to the information, and
- Timing and exposure.

After a short description of the selected measures the expert evaluations were done according to the following scheme:

Figure 1: Screening system of road safety measures (source: ROSE 25, 2005, p. 63)

**THE FOLLOWING SCORES ARE USED TO GIVE A ROUGH SCREENING OF THE ACTION:**














-  The criteria have been met and are fulfilled.
-  According to these criteria, the action is ranked neither good nor bad, rather neutral.
-  The criteria have not been met by the action.
- No colour/not applicable: no assessment with regard to these criteria have been undertaken since these criteria are not relevant (or not applicable) due to either obvious reasons, or reasons which have subsequently been illustrated in the section on 'explanation of the scores'.
- No colour/no information: no assessment was possible due to a lack of information.
- This screening is completed by an explanation of the most important or most interesting criteria. Again we have to point out that these explanations are based on our expert opinions. The explanations aim at a clear and transparent understanding of our ideas and our approach towards good practice in RSE.

Each measure which was considered to be good practice was described by the ROSE 25 experts according to the defined criteria. The results of the evaluation are presented in the final project report. How many of the criteria and to which amount they were fulfilled is displayed by the different colours; an example from the report is presented below.

Figure 2: Example of evaluating road safety measures (source: ROSE 25, p. 130)

*Analysis and discussion (Heavy vehicles, Denmark)*

*Table 32: Scores of Heavy Vehicle on key criteria.*

<u>Criteria</u>	
Theoretical and practical elements/active involvement	
Focus on knowledge	
Focus on skills	
Focus on attitude	
Attractiveness for target group	
Embedded in other RS measures	
Embedded in wider context (in different school subjects)	
Involvement of several partners	
Easy to duplicate	
Quality of information that is spread	
Quality of the instructors/communicators	
Accessibility of information	
Timing of exposure	

The colour system helps readers to quickly get an overview on the evaluation results of a single measure.

## 4.2.2 EU project SUPREME

The EU Project SUPREME (Summary and Publications of Best Practices in Road Safety in the Member States, 2007) dealt with best practices in road safety in the Member States covering nine different fields of road safety work, amongst others driver rehabilitation. It aimed at proposing best practices on two levels: first on national level and second on EU-level.

Several assessment steps were conducted. The first step was to select measures for further analysis by means of an EU-wide online-questionnaire survey based on the following eight criteria:

1. Focus of the measure: Best Practice Measures (BPM) have a clearly defined focus. This includes a clear definition of the road safety problem to be solved and precise idea of how the measure will affect this problem.
2. Size of the road safety problem: BPM aim at reducing traffic accidents or risk factors which stand for a large proportion of severe injuries and fatalities in road accidents.
3. Expected effects on safety: BPM provide a quantitative assessment of the likely impact of the measure on accidents or on risk factors.
4. Evaluation of effects: An evaluation of effects of BPM on road safety is ideally based on accident statistics. Ideally, the implementation of BPM results in an obvious reduction of fatalities and severe injuries.
5. Costs and benefits: BPM provide a cost-benefit analysis with the result that benefits exceed their costs.
6. Acceptance: BPM have good public and policy maker acceptance.
7. Sustainability: BPM are not single events, they are rather characterised by duration and continuity. Likewise their effects on road safety are long term effects.
8. Transferability: BPM include strategies for using the measure successfully on a larger scale, either on the regional, national or European level.

Country experts from each Member State and additionally country experts from Norway and Switzerland entered the data in an online-questionnaire. In the next step, several expert groups were composed to evaluate the submitted road safety measures. In order to identify best practices each expert group developed an own assessment scheme; two examples are presented below.

### **Example 1: Evaluation of driver rehabilitation**

As regards the area “driver rehabilitation and diagnostics” best practices could not be identified due to lack of effectiveness proof based on accident statistics (see above, criteria 4). Therefore, the expert group identified good practices in DR just by describing the evaluations. The issues covered were: target group and allocation criteria for participation, main characteristics of the intervention, size of the road safety problem, effects on safety (reduction of recidivism, reduction of risk factors), feasibility (acceptance, sustainability, transferability). Moreover, it was explained why DR had been selected as best practice measure.

### **Example 2: Evaluation of enforcement**

Regarding enforcement several measures were identified which fulfil all criteria (see above; criteria 1 to 8). The assessment process was done in several steps.

At first an efficiency check was carried out - if and how reliable the proof or evidence was. At second an assessment of other qualification criteria followed. At the end, a final ranking of the measures was made using a categorical evaluation scheme; see table below.

**Table 1: Evaluation criteria for enforcement measures (SUPREME, Thematic Report: Enforcement, 2007, p. 29)**

Criterion		Value and value label	
1	Description of the measure	0	Superficial
		1	Fair
		2	Adequate
2	Definition of target group	0	Superficial
		1	Fair
		2	Adequate
3	Size of road safety problem	0	Minor
		1	Moderate
		2	Major
4	Expected effects on safety	0	Not estimated
		1	Not estimated but obvious
		2	Estimated
5	Evaluation of effectiveness	0	Insufficient evidence of effectiveness
		1	Data indicate effect or previous studies
		2	Adequate evaluation
6	Costs and benefits	0	Not estimated, no indication of cost-effectiveness
		1	Not estimated but may be cost-effective
		2	Estimated and costs exceed benefits
7	Public acceptance	0	Not assessed and no indication of high acceptability
		1	Not assessed but may be reasonably acceptable
		2	Assessed and favourable
8	Sustainable effects	0	Not likely
		1	Possible but not certain
		2	Probably sustainable effects
9	Transferable effects	0	Not likely
		1	Possible but not certain
		2	Probably transferable effects

The evaluations were mainly based on the information provided in the questionnaires; only in some cases the country experts were asked for additional specifications. This led to an overall rating matrix with a summary score for each measure (right column, see table below).

**Table 2: Rating of submitted enforcement measures (SUPREME, Thematic Report: Enforcement, 2007, p. 31)**

Subcategory	Measure	Scores by criteria									
		1	2	3	4	5	6	7	8	9	Σ
		Description of measure	Definition of target group	Size of road safety problem	Expected effects on safety	Effectiveness	Costs and benefits	Public acceptance	Sustainability of effects	Transferability of effects	Total score
Speed cameras	055 Fixed speed cameras (UK).	2	2	2	2	2	2	2	2	2	18
	088 Automatic speed enforcement (F)	2	2	2	1	2	1	2	2	2	16
	106 Automatic speed cameras (S)	2	2	2	2	1	2	2	1	2	16
	143 Fixed speed cameras (ES)	2	2	1	1	2	1	0	1	2	12
	144 Fixed speed cameras & speed limit (B)	2	2	1	1	1	1	0	1	2	11
	154 Speed cameras (FIN)	2	2	2	1	2	1	2	2	2	16
	196 Speed cameras (N)	2	2	2	1	2	2	2	2	2	17
	215 Speed cameras (MLT)	2	2	1	1	1	1	1	2	2	13
	217 National speed camera programme (ES)	2	2	2	2	1	1	0	1	2	15
	237 Speed cameras in Flanders (B)	2	2	2	1	2	1	1	1	2	14
	065 Mobile speed cameras (NL)	2	2	1	1	2	2	1	1	1	13
	238 Automatic speed control (DK)	2	2	2	1	1	1	2	1	2	14
Section speed	082 Section speed control (NL)	2	2	2	1	2	2	1	2	2	16
	290 Section control (A)	2	2	1	1	2	2	1	2	2	15
	353 Section speed control (CZ)	2	2	1	1	2	1	1	1	1	12
Drink driving	030 Random breath testing (S)	2	2	2	1	2	1	2	2	2	16
	044 Random breath testing (NL)	2	2	2	1	2	1	2	1	2	15
	249 Breath testing (DK)	2	2	2	1	2	0	2	1	1	13
	318 All blow! (EST)	2	2	2	1	2	0	1	1	1	12
	431 Random breath testing (FIN)	2	2	2	1	2	1	2	1	2	15
Other	114 Seat belts (S)	2	2	2	1	2	2	2	1	1	15
	344 Lowering of the alcohol limit (DK)	2	2	1	1	1	0	0	1	1	9
	119 Penalty point system (LV)	2	2	2	2	1	2	1	1	2	15

For every SUPREME area - like “driver rehabilitation and diagnostics” and “enforcement” - the results for all the submitted road safety measures were laid down in a report. In a next working step of the project, a handbook on the national level and one for the European level were developed to present best practice measures that are recommended to be transferred and implemented in other countries. These examples were displayed in the handbooks by an evaluation scheme: a distinction between best, good and promising practices was made whereby this differentiation was optically supported by a colour scheme:

- Green – best practice examples
- Yellow – good practice examples
- Orange – promising practice examples.

### 4.3 *Evaluation approaches in driver rehabilitation*

In a next step it was reviewed which evaluation approaches were specifically used in the field of DR, i.e. which variables were considered and how the evaluation was carried out. This work step might deliver additional information on relevant variables for the evaluation tool.

An early publication in this field concerning evaluation criteria was done by Nickel (1992). He published a considerable number of content related criteria which have to be met in order to develop a good DR programme. The catalogue of criteria refers either to standards for DR providers/institutions or to the DR programmes.

According to the author, institutions which carry out DR should be obliged to report compliance to defined scientific standards. This regards to quality assurance systems and quality assurance handbooks.

Criteria for the appropriateness of a DR programme are the following (Nickel, 1992):

- Development of theoretical background (“model”): This concerns psychological aims and their implementation within the driver rehabilitation programme, curricula appointments, as well as education and training of course leaders.
- Efficiency investigation: This means programme evaluation and process evaluation.
- Quality assurance: this is related to supervision, further training and education and quality evaluation.

In Austria, evaluation criteria for DR programmes were developed by the so-called traffic psychological coordination council which has an advisory function for the Ministry of Transport, Innovation and Technology (BMVIT) regarding DR (Bukasa, 2002). Relevant publications and already existing criteria for authorization and evaluation of DR courses were considered.

The following list of evaluation criteria was composed:

- Scientific background
  - DR concept is based on theories of personality and relevant psychological theories on attitudinal and behavioural modification
  - Psychological aims are defined
  - Methods of intervention are described
  - Appropriate scientific literature was reviewed and analysed
  - State of the art in this field was considered appropriately and sufficiently.
- Appropriateness of DR model
  - Course model is appropriate for application within the course type
  - Course model is appropriate for the specific problem of the offender
  - Course model is appropriate for the defined target groups and their deficits
  - Entry and exclusion criteria exist
  - Clear reference of the course model for each course type to the Austrian legal frame of DR
  - Description of the course model has to include that the
    - course aims are described concretely, related to the problem behaviour
    - course contents and intervention methods correspond to the aims
    - procedure and course materials are laid down in detail (e.g. a prototypical course is demonstrated).
- Evaluation of DR models



- Empirical evaluation concept that considers sufficiently the scientific state of the art, i.e.
  - relevant literature concerning evaluations in this field were analysed sufficiently
  - hypotheses were formulated regarding course's aims
  - evaluation plan exists.

The catalogue concludes that experts who evaluate DR course models should also fulfil certain requirements (final degree in psychology, specific experience and knowledge in the field of DR).

Smith, Buckle, Keigan, Buttress and Stone (2004) evaluated the drink/drive rehabilitation (DDR) scheme in the United Kingdom by a series of investigations. They targeted three different areas: encouraging court referrals, encouraging offender take-up and enhancing course operation.

The authors' good practice recommendations include the following (p.25ff):

- Meeting with appropriate court officials or representatives when starting to provide a DDR course in a new area or to a new referring court.
- Offer referring courts the opportunity to receive training in the administration and operation of the DDR scheme for all appropriate officials at a regular level.
- Written information to be distributed to all appropriate court officials at referring courts. Information should be given about aims and objectives of DDR scheme, administrative requirements and procedures, target population, national take up, research findings demonstrating the effectiveness of the scheme, content and outcome of the organisations, information on fees, etc..
- Send regular news letters to courts; provide additional materials; give information for courts
- Written materials for offenders available in the referring courts.
- Contact offenders as soon as possible after referral; regular contacts for those who do not answer.
- Contact by phone providing further details of course.
- Number of options for course sessions.
- Transport service; provide information on low cost child-care for single parents.
- Provide payment plans; allow offenders to pay by direct debit.
- Ensure that course format confirms DfT guidelines (min. 3 sessions, each session min 6 hours, total duration 16 – 30 hours).
- Make use of non completion certificates.
- Each organisation should provide a questionnaire on knowledge and attitudes in order to investigate improvements.
- Regular monitoring (internal and external assessments) on the quality of course operation.

Sheehan et al. (2005) evaluated the Drink Driver Rehabilitation and Education in Victoria in Australia. One aim of this research was to define what best practice drink drive rehabilitation is. Additionally the authors compared this to what is currently delivered in Victoria. Operations of DR programmes as well as outcome issues were considered.

The authors define several best practice characteristics of DR programmes (criterion for effectiveness is recidivism):

- DR programmes are combined with license disqualification periods.
- If psychosocial functioning is improved, this will improve the effectiveness of the rehabilitation programme.
- Those programmes that are most effective combine intervention modes, such as education/information, lifestyle change strategies, probationary contact and supervision.
- Small group size (8-10 participants).

- Within the programme strategies should be used that are based on cognitive behavioural therapy techniques and strategies.
- Brief interventions should be included in the programme, because they have been proven to be effective to reduce alcohol consumption by heavy drinkers.

Based on the evaluation outcomes of the Victorian DR programme, Sheehan et al. (2005) provide recommendations for the improvement of DR which can serve as evaluation criteria as well. These are:

- One government department should be responsible for overseeing the programme.
- Alcohol addiction problems should be identified at an early stage. It should be a requirement for all offenders, not only for those who want to get back their driving license, and it should be a rehabilitation programme.
- Alcohol-interlock programmes should be related to ongoing rehabilitation.
- It should be reviewed if offenders have to serve their full suspension period before participating in the interlock programme.
- An information tool should be developed in order to give adequate information regarding the process of driver rehabilitation to the offenders.
- A central registry for offenders is recommended in order to assess effectiveness of the current system.

#### **4.4 *Relevance of results for the WP5 evaluation instrument***

In the area of product or services evaluations the tools are mostly using rather simple categorical evaluation schemes (non-verbal and verbal). The advantage is that they can be easily understood by the public or the users. This aspect is important for the WP5 evaluation instrument as well.

In ROSE 25 the description mode and the colours that are used to display the information seem to be very useful for the WP5 task. The relevant evaluation categories and the mode of presentation are designed to pass the information clear and quickly to the recipient.

In the SUPREME project a colour system was applied as well to make the assessment of the measure easily understandable and to give a quick overview to the reader. The two examples of evaluation processing carried out in this project represent different approaches: a descriptive and a numeric one. The disadvantage of the descriptive one is that it does not provide the possibility of indicating the amount of fulfilment of specific criteria. This can be rather provided by a numeric approach.

Descriptive criteria without any evaluation scheme are mainly available from former evaluation studies in the field of DR as well. They were focussing on the contents and were used by evaluators with specific expertise in this field. Nevertheless, the content related information of these studies can serve as a check for the contents to be mentioned in the WP5 evaluation instrument.

## 5 Development of DRET – Driver Rehabilitation Evaluation Tool

### 5.1 *General considerations and evaluation concept*

The development process started with a discussion process on the tool's goal and general approach within the research team taking the results of the former research steps into account. It was specified that the overall aim of the WP5 DR evaluation tool is to provide good practice criteria for examining and appraising existing and upcoming DR systems and programmes for DUI/DUID offenders based on the outcomes of the entire WP5 research reached so far. The evaluation instrument to be developed should offer a tool to compare (existing and planned) DR programmes and systems with the standards derived from the WP5 investigations.

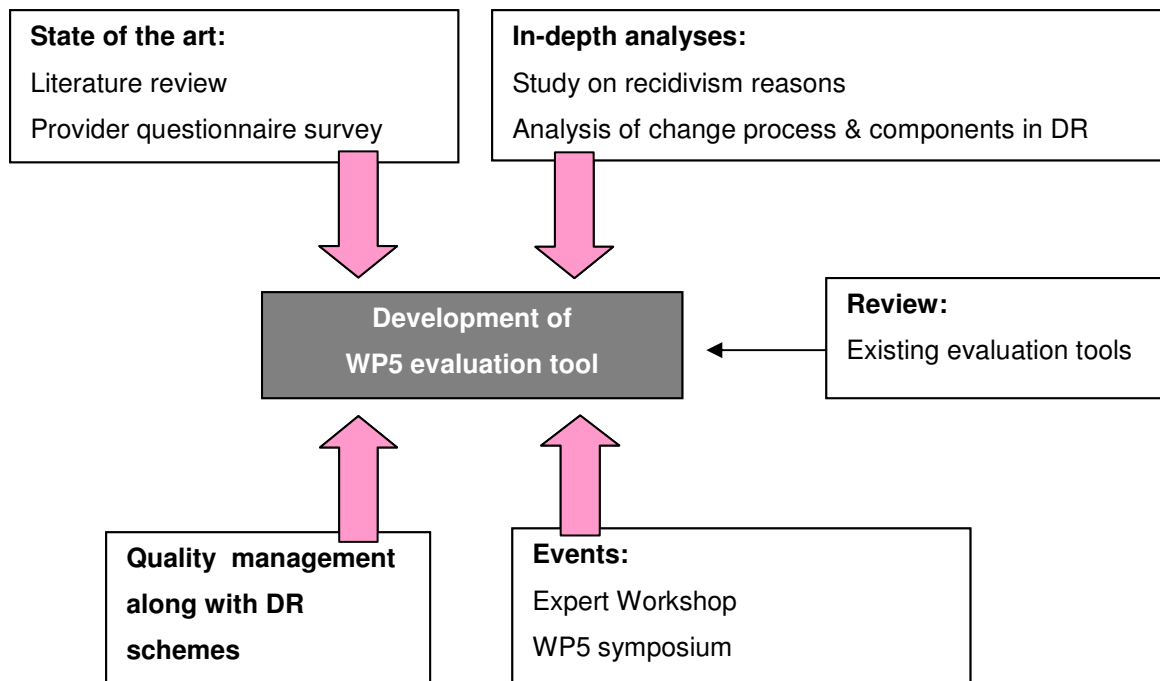
The contents of the evaluation tool to be developed should address the main DR issues. Thereby, the current WP5 research activities should be used for identifying the areas and contents to be considered. Moreover, evaluating a DR system or programme against the WP5 standards (good practice) implies that the main WP5 results should serve as model against which the evaluation is carried out.

Thus, the following WP5 input sources were considered for the tool development:

:

- Literature review (documented in Del. 5.1.1)
- Provider survey (documented in Del. 5.1.1)
- In-depth analysis on recidivism reasons (documented in Del. 5.2.1)
- Analysis of change process and components in driver rehabilitation courses (documented in Del. 5.2.1)
- Research on quality management systems along with DR schemes (documented in Del. 5.2.3)
- Expert workshop (February 2008)
- WP5 symposium (May 2008).

The chart below shows the different sources that were considered in the development process.

**Chart 1: Sources for development of WP5 evaluation tool**

Thus, the evaluation instrument to be developed is a service tool in the area of DR which can be used furthermore to the next research step of validating existing DR schemes by means of this tool (WP5.2.4). It can be directly used by several user groups in order to get information on the adequacy, completeness and quality of certain DR measures in question based on the actual DRUID WP5 standards.

The following main user groups were identified:

- Country experts in the field of DR
- Providers of DR services
- Accreditation or authorization bodies for DR
- Courts which assign DUI/DUID offenders to DR measures
- Independent scientists in the field of DR or traffic safety
- Other institutions or persons which or who directly deal with DR.

Due to the different user groups with more or less experiences and expertises in DR the tool should be user friendly and easy applicable for all of them. For this reason, an evaluation scheme with several categories supported by a colour system similar to what was found in the above mentioned review of existing evaluation tools was found to be adequate.

The evaluation instrument to be developed within DRUID WP5 was named DRET (Driver Rehabilitation Evaluation Tool).

## **5.2 Inclusion of relevant WP5 research for tool development**

After having discussed the possible structure and contents of the tool development the WP5 sub-groups respectively team members who were in charge for the different research activities or topics (literature review, provider questionnaire survey, in-depth analysis on recidivism, analysis of change

process and components in DR courses, quality management systems along with DR schemes) prepared the input for the tool development.

At the next WP5 work meeting each sub-group or team member in charge for the respective topic presented the input which was considered to be most important for the development of the evaluation instrument. Based on these presentations and further discussions in the entire WP5 team key areas relevant variables were fixed and an allocation of the respective main WP5 research outcomes was carried out.

This resulted in a list of content related evaluation variables to be considered in DRET:

- Programme access and consequence
  - Regulation of participation:
    - Participation should be an integrated part of the licensing procedure.
    - In case of not mandatory participation incentives should be given and made transparent for the target groups.
    - Participation should start soon after the offence.
  - Assignment:
    - Formal criteria, e.g. BAC-level, detected illicit substance or recidivism can be used for target group specific assignment to a programme.
    - An additional driver assessment by means of standardized and objective tools can provide valuable information for rehabilitation planning on an individual level.
    - An additional driver assessment should be carried out in defined cases, at least for the following high risk groups: suspicion of addiction, BAC of 1.6 ‰ or more, recidivism after DR participation within five years, two or more substance impaired offences within five years, substitution therapy, refusal of the alcohol/drug test.
    - Driver assessment should make use of a multidisciplinary approach addressing medical, psychological and social aspects related to the problem behaviour.
    - Driver assessment should be a standardized procedure using objective, valid and reliable tools, carried out by qualified personnel.
- Target group(s) of programme
  - A range of programmes should be available for different target groups.
  - DR programmes' content/methods should be target group specific.
  - At least the following target groups should be distinguished: DUI – non-addicts; DUI – addicts, DUID – non-addicts, DUID – addicts (not including substitution), DUID in substitution therapy.
- Programme design and structure
  - Group interventions as the most common approach can be used for a wide range of substance impaired offenders. Single interventions can be an appropriate approach for specific problem constellations. A lot of appropriate concepts for group interventions exist, while equivalent concepts for single interventions are still lacking.
  - DR programmes should be carried out in a standardized setting and procedure matching the specific needs of the target group. At least the following elements should be considered: Necessary infrastructure (e.g. public transport access, ...); appropriate rooms; programme materials; time frame of programme operation (at least three weeks as change in attitude and behaviour needs time); number of sessions (minimum four sessions, at least two days between each session); number of

- participants in case of group interventions (preferable 6 to 10 for group dynamic reasons).
- Programme aims and methods should be clearly defined regarding: Attitudinal and behavioural change, basic knowledge (e.g. legal consequences, impairment effects of substances), strategies to avoid re-offences, problem awareness regarding substance impaired driving, modifying consumption patterns, establishing alternative new behaviour.
- Trainers
    - Specially educated and trained staff in traffic psychology, psychotherapy and didactics, intervention techniques for attitudinal and behavioural change, substance use issues, group dynamics, motivation strategies, etc. should carry out DR programmes; trainers in Europe are commonly psychologists.
    - Trainers should regularly participate in advanced trainings and have regular inter- and supervision.
  - Programme completion
    - Successful programme completion should result in a certificate.
    - Successful completion should be defined, at least in a participant-provider contract.
    - The participant-provider contract should include at least the following elements: confidentiality, compliance (e.g. sobriety, punctuality, active participation, attendance in all sessions) and transparency of consequences in case of non-compliance.
  - Scientific background
    - DR programmes should be developed on a scientific base. Psychotherapeutic and psychological approaches with education elements are the most promising.
    - DR programmes should support above all the following processes: Self-observation and –reflection, discussion and confrontation, development of alternative, new behaviour, open-trustworthy group climate, achievement of behavioural goals (e.g. self-control), emotional experiencing and involvement, goals' setting and commitment to stick to them, emotional verbal/non-verbal expressing.
  - Evaluation
    - DR programmes should be evaluated on a regular base. The most relevant road safety criterion is recidivism rates. Further evaluation criteria can be related to content / method / trainer-participant relation / participant-participant relation / individual change.
    - Study designs can be follow-up evaluation, pre-post evaluation, overall participant feedback or one time data collection based on a theoretical frame.
    - Evaluation results should be published and available for the general public.
  - Quality management
    - There should be a national body for authorisation and accreditation (based on a quality management system) of DR providers and programmes.
    - In case a national body for authorisation and accreditation does not exist, the following quality management elements should at least be implemented on a provider or organisational level: management related elements, staff related elements, programme procedure related elements, programme operation related elements.

### **5.3 Establishment of first DRET version**

Based on the above mentioned topics and contents the first draft DRET version was established. The contents were arranged as a kind of a check list. A colour based categorical evaluation scheme (Green – Red – Grey) was added and positioned left to each content to be evaluated. Three evaluation categories were distinguished which were horizontally arranged one by one. Green means that the item is fulfilled, red means that the item is not fulfilled and grey means that the item is not relevant.

The tool was completed by composing a cover sheet with the name of the evaluation instrument and the reference to the DRUID project and to WP5. Moreover, instructions for use were established and added on the second page. The instructions for use consisted of two parts. First it was shortly explained what is DRET for and second it was specified how to use DRET. From the third page on the specific DR topics to be evaluated were presented.

The WP5 team members again reviewed this first draft version. Further information was added and some corrections were made. The input was brought together and considered in the establishment of first DRET version.

#### **5.3.1 Cross check by different expert groups**

The first DRET version was submitted to different experts as considered in Annex 1 of the DRUID Core Contract for crosschecking the instrument. It was aimed to check understandability and easy processing besides the logic of the entire system.

In total 15 experts from the following occupational categories and countries were involved:

- One psychiatrist carrying out medical assessments in the course of fitness to drive in Austria;
- One psychologist conducting traffic psychological assessments in Austria;
- Three DR trainers (psychologists), one in Austria, one in Belgium and one in France, the Belgium and France one are also researcher in traffic safety issues;
- Three traffic safety researcher (psychologists), one in Germany, one in France and one in Poland;
- One methodologist (clinical psychologist) in Austria;
- One traffic jurist in Austria;
- One quality control manager in Austria;
- One driving instructor's trainer and offender 's provider in France;
- One road safety education manager at the ministry of transport in France;
- One traffic police head officer in France;
- One English trainer for proof reading from Great Britain.

The names of these experts are listed in the acknowledgments.

The expert's feedback to the first DRET version refers to the following aspects:

- Structural issues
  - DR system and DR programme related issues should be separated
  - Evaluation contents and additional WP5 information should be clearly separated whereby an additional column for the comments were proposed
- Categorical evaluation scheme
  - Additional evaluation categories "partly yes" should be added
  - The evaluation category "not relevant" should be changed to "don't know"

- The evaluation scheme should not only be based on colours but should also include the respective verbalisations, especially in case of not having a colour printer.
- Content related issues
  - Evaluation contents and DRUID WP5 comments or explanations are mixed
  - Evaluation contents need more additional information
  - Some DR contents could only be answered with “yes” or “no” in the sense of existing and not existing but could not be evaluated
  - Contents should be formulated in such a way that in principle all evaluation categories could be selectable
  - Evaluation contents should be formulated as short statements.
- Instructions for use
  - More explanations should be given
  - How the results can be used should be added.

### 5.3.2 Modification and adaptation of DRET

Based on the feedback received by the different experts and further discussions within the WP5 team a restructuring of DRET was carried out. Most of the proposed ideas and suggestions mentioned above were considered, thus the evaluation tool was further elaborated and optimized.

The following table provides a chronological overview of the development process of DRET.

**Table 3: Timeframe of DRET development**

Time frame	Task
15 <sup>th</sup> May 08 DRUID WP5 meeting in Thessaloniki	Presentations of evaluation schemes applied in different areas First discussions about existing tools, methods, first contents and some structural ideas Distribution of work regarding content criteria within the team
Midst until end of May 08	Composition of content related criteria by single WP5 members Sampling of the input
2 <sup>nd</sup> – 3 <sup>rd</sup> June 08 DRUID WP5 meeting in Vienna	Presentations of methodology and input contents Definition of aim and sampling of user groups Fixation of main areas and WP5 information sources to be considered with two different levels: the entire system of DR and the single DR programmes
Until 13 <sup>th</sup> of June 08	Preparation of first DRET version
15 <sup>th</sup> of June - 15 <sup>th</sup> of July 08	Cross check phase with different experts
Until end of July 08	Sampling of cross check input, modification of DRET and composition of new DRET version Distributing new DRET version to WP5 team members for last check and corrections
Beginning of August 08	Consideration of further input regarding the new DRET version Additional slight modifications Establishment of final DRET version



## 5.4 *Description of final DRET version*

The DRUID WP5 evaluation instrument DRET which is the acronym for Driver Rehabilitation Evaluation Tool) consists of the following parts:

**Cover.** This part contains a specification of the evaluation tool, its topic within WP5 and the link to the DRUID project.

**Instruction.** This part provides information on what is DRET for, for whom it is useful, and how it is structured. It further gives specific instruction for using the evaluation tool, how to fill in the answers, how to proceed with the evaluation. Information sources are provided if improvement is required.

**Evaluation.** This part starts with a basic data input sheet, followed by the evaluation contents. This refers to the part(s) to be evaluated (DRET-S or DRET-P or both), the name of the programme in case of a DR programme evaluation, the name(s) of the evaluator(s), comments which the evaluators(s) would like to make and the date of evaluation.

In principle, answering could be done either in an electronic or paper-pencil mode by marking or ticking on (electronic mode) the corresponding category of the evaluation scheme.

The entire DRET is documented below, and provided in the annex as well.



# **DRET**

## **Driver Rehabilitation Evaluation Tool**

### **EU Project DRUID**

Driving under the influence of alcohol,  
drugs and medicines

## **Work Package 5: Rehabilitation**

Contract No. TREN - 05-FP6TR-SO7.61320-518404-DRUID



## DRET - Driver Rehabilitation Evaluation Tool

### What is DRET for?

DRET provides an orientation about driver rehabilitation (DR) measures in your country. By means of the DRET evaluation you can assess how much the DR system or programme(s) applied in your country is/are in compliance with the current EU research status in this field.

DRET is a tool to evaluate new or existing DR measures for **drink driving (DUI)** and/or **drug driving offenders (DUID)**. It is not suitable to evaluate measures that primarily target the treatment of alcohol or drug addiction.

DRET provides a systematic and comprehensive check/evaluation instrument for planned or already existing DR programmes and systems. It offers a tool to find out if the relevant elements regarding the establishment and operation of DR measures for DUI/DUID offenders are included or whether there are still any gaps or weak points which should be improved.

DRET is based on the DRUID research in Work Package (WP) 5 (Rehabilitation) which focussed on a thorough and comprehensive investigation on all relevant DR issues for DUI/DUID offenders. The WP5 activities included the conduction of a review based on international publications and expert knowledge in this field, a European-wide DR provider survey, an empirical study on recidivism despite of having participated in a DR course, an analysis of the change process based on a large European sample of DR course participants and a review of quality management systems in DR and addiction treatment. DRET considers these research findings and provides a tool regarding good practice for a DR programme and system.

### For whom is DRET useful?

DRET is a support and serving tool for different user groups who are working in the field of DR, who are planning to implement such kind of measure, who are responsible for DR services, its quality and efficiency. This includes above all developers and providers of DR services and programmes, authorization or accreditation bodies for DR measures, traffic safety experts, researchers or scientists.

### How is DRET structured?

DRET is structured as follows:

- Input sheet for basic evaluation data;
- DRET-S (National System level): restricted to the evaluation of frame conditions for DR systems in a country;
- DRET-P (Single Programme level): restricted to the evaluation of a single DR programme.

Based on the user's concern or purpose, either both parts of DRET or only one of them can be relevant for evaluation. For example, if a developer of a single DR programme wants to evaluate its compliance with the DRUID WP5 research results on DR, DRET-P is sufficient. Or if an implementation of DR in a country is planned DRET-S is of special importance.

Please note: Each DR programme has to be evaluated separately !



## How to use DRET?

By using DRET you can compare your national DR system or single DR programme(s) to the DRUID WP5's identified good practices.

DRET is an evaluation tool which consists of three columns:

Evaluation scheme	Evaluation content	DRUID WP5 research outcomes
It provides an assessment of each DRET content as follows: <input type="checkbox"/> <b>yes</b> => fulfilled <input type="checkbox"/> <b>partly yes</b> => partly fulfilled <input type="checkbox"/> <b>no</b> => not fulfilled <input type="checkbox"/> <b>don't know</b> => cannot be evaluated yet.	It contains the concrete topics to be assessed.	It provides relevant information on corresponding DRET topics.  These DRUID WP5 research outcomes either reflect scientific common sense or refer to issues under scientific discussion.

In principle, answering could be done either in an electronic or paper-pencil mode by marking or ticking on (electronic mode) the corresponding category of the evaluation scheme.

## What are the DRET results for?

The colour system clearly shows the evaluation results of the DR measure (system or single programme) in question.

In general, the DRET respondents are free to decide how to use the evaluation outcomes, either just as a feedback on the state of the art or as an input for improvements of the DR measure having been evaluated.

Regarding improvements - in order to fulfil the essential requirements according to DRUID WP5 - the categorical evaluation scheme implies:

**“yes”** => no further action is required

**“partly yes”** => some improvements are suggested

**“no”** => improvements or changes are highly recommended

**“don't know”** => additional information is needed for evaluating the corresponding content.

The DRUID WP5 deliverables provide further detailed information on specific DR issues regarding possible improvements:

Deliverable 5.1.1 - State of the Art on Driver Rehabilitation: Literature Analysis & Provider Survey

Deliverable 5.2.1 - Good Practice: In-Depth Analysis on Recidivism Reasons & Analysis of Change Process and Components in Driver Rehabilitation Courses

Deliverable 5.2.3 - Quality Management Systems established along with Driver Rehabilitation Schemes

## Abbreviations:

BAC	Blood alcohol concentration
DR	Driver Rehabilitation
DRET	Driver rehabilitation evaluation tool
DRUID	EU-Project: Driving under the Influence of Drugs, Alcohol and Medicines
DRUID WP 5	DRUID Work Package 5 (Rehabilitation)
DUI	Driving under influence of alcohol
DUID	Driving under influence of (illicit) drugs
P	Programme level
S	System level
QM	Quality management



<b>DRET - Driver Rehabilitation Evaluation Tool</b>
<b>Driver rehabilitation (DR) for DUI (drink-driving) / DUID (drug-driving) offenders</b>
<p><b>Evaluation of DR to be carried out (please indicate):</b></p> <p><input type="checkbox"/> on national system level only (DRET – S)</p> <p><input type="checkbox"/> on single programme level only (DRET – P)</p> <p><input type="checkbox"/> both, on system and programme level (DRET – S and DRET – P)</p>
<p><b>Name of programme (in case of a DR programme evaluation):</b></p> <input style="width: 100%;" type="text"/>
<p><b>Name of evaluator(s):</b></p> <input style="width: 100%;" type="text"/>
<p><b>Comments:</b></p> <div style="border: 1px solid black; height: 200px; width: 100%;"></div>
<p><b>Date of evaluation:</b> <input style="width: 150px;" type="text"/></p>



## DRET - S

### Driver Rehabilitation Evaluation Tool – National System Level

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<b>LEGAL IMPLEMENTATION - GENERAL CONDITIONS</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR measures are part of a comprehensive countermeasure system for DUI/DUID</b>	Besides the DR system itself this implies for instance: <ul style="list-style-type: none"> <li>• Regulations for measures of detection and prosecution of DUI/DUID offenders exist (e.g. mandatory roadside breath/drug tests or other evidentiary methods);</li> <li>• Central registry system of traffic offenders - including DUI/ DUID - is installed in the country and supports that high risk offenders are detected;</li> <li>• DR should be an additional measure to other sanctions (e.g. driving license withdrawal) but should not replace them.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Legally regulated DR participation</b>	<ul style="list-style-type: none"> <li>• Participation in DR is mostly legally regulated, mainly by the licensing authorities and to a less degree also by courts. Thereby, participation is not always obligatory, about half of the programmes are voluntary ones.</li> <li>• Consequences of participation are mostly linked to licensing (re-licensing, licence reinstatement, reduction of suspension periods, ongoing validity of licence), but also to a penalty point system, to an upcoming driver assessment or to criminal prosecution.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Linkage of DR with licensing procedure</b>	Examples for linkage are: <ul style="list-style-type: none"> <li>• DR programmes are combined with licence disqualification periods;</li> <li>• DR participation is a precondition for re-licensing;</li> <li>• DR participation supplements other licensing actions;</li> <li>• DR participation is an accompanying measure to licence suspension;</li> <li>• DR participation is an accompanying measure for licence prolongation.</li> </ul>



<b>LEGAL IMPLEMENTATION - SPECIFIC DR REQUIREMENTS</b>		
<input checked="" type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Availability of target group(s) specific programmes</b>	<ul style="list-style-type: none"> <li>• DUI/DUID offenders are a heterogeneous group and there is general agreement on the relevance of identifying various types of DUI/DUID offenders with regard to their different needs and opportunities for rehabilitation.</li> <li>• Two groups, namely non-addicts and addicts should at least be distinguished as they require different interventions or treatments.</li> <li>• The majority of the European programmes already differentiate between DUI and DUID offenders and general traffic offenders. Addiction is a very common exclusion criterion for the European DR programmes.</li> </ul>
<input checked="" type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of standards for programme operation</b>	<ul style="list-style-type: none"> <li>• Regulations for time frame of programme operation exist (at least total duration, number of sessions and/or units, duration of sessions/units).</li> <li>• Regulations for successful course completion exist (at least no alcohol or drug intoxication, co-operation, attendance of all sessions).</li> <li>• Regulations for non-completion exist.</li> </ul>
<input checked="" type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of exceptional rules</b>	<ul style="list-style-type: none"> <li>• Exceptions from the normal DR procedure due to individual conditions are specified.</li> <li>• Special services are mostly offered due to communication problems/operation of programme in different languages or in a single setting, e.g. with an interpreter.</li> </ul>
<input checked="" type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of DR provider requirements</b>	<ul style="list-style-type: none"> <li>• Qualification criteria for authorizing providers are laid down (at least appropriate DR programme(s), necessary staff and infrastructure).</li> <li>• Procedure of acquiring, maintaining and losing DR authorization is defined.</li> </ul>



<b>ASSIGNMENT to DR</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of formal criteria on national level in order to assign offenders directly to a DR programme or to driver assessment prior to DR</b>	<ul style="list-style-type: none"> <li>• In most of the DR programmes the substance and/or the amount of intoxication (e.g. BAC-level) during the offence determine course participation.</li> <li>• Recidivism is the second frequent assignment reason to DR.</li> <li>• Driver assessment is necessary to identify DUI/DUID addicts including offenders in substitution therapy in order to assign them to adequate intervention.</li> <li>• Driver assessment should at least be carried out in the following cases:             <ul style="list-style-type: none"> <li>○ Offenders with a BAC of 1.6‰ and more;</li> <li>○ Re-offending within five years;</li> <li>○ Refusal of alcohol/drug test.</li> </ul> </li> </ul>
<b>QUALITY MANAGEMENT (QM) in DR</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of national QM standards</b>	This refers to obligations for DR providers regarding: <ul style="list-style-type: none"> <li>• Management and staff related elements (e.g. standards of documentation, data protection, trainer qualification);</li> <li>• DR operation and programme(s) (e.g. availability of breath tests for assessing intoxication during course, scientific background of programme, evaluation studies).</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Existence of national QM body</b>	<ul style="list-style-type: none"> <li>• A national QM body is necessary to assure a specified service quality in DR.</li> <li>• The QM body should have an authoritative position to execute the operative tasks.</li> <li>• The QM body should be independent from DR providers.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of operative tasks of QM body</b>	QM body should be responsible for: <ul style="list-style-type: none"> <li>• Authorisation of DR providers and programmes &amp; maintenance;</li> <li>• Examination of DR providers internal quality in regular time intervals;</li> <li>• Verification in case of suspicion of quality violations according to a defined procedure;</li> <li>• Imposition of consequences and improvements in case of verified lack of quality.</li> </ul>





## DRET – P

### Driver Rehabilitation Evaluation Tool – Single Programme Level

**DRIVER ASSESSMENT prior to DR (only to be evaluated if applicable)**

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Implementation of a multidisciplinary approach</b>	<p>In case of additional driver assessment prior to DR the following issues have to be taken into account:</p> <ul style="list-style-type: none"> <li>• For DUI and DUID offenders, the assessment approach is mainly psychological; medical examinations are conducted as well.</li> <li>• The medical examination of offenders essentially focuses on substance use disorders within a fitness to drive evaluation.</li> <li>• The psychological examination can provide essential information with regard to the psychological and social aspects related to the problem behaviour.</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Application of objective, valid and reliable assessment tools</b>	<ul style="list-style-type: none"> <li>• A wide range of screening and assessment measures exist which provide information about the problem severity and consumption pattern.</li> <li>• Traffic psychological assessment tools are very fine-tuned to the specific problems of DUI/DUID offenders and are often validated on this population.</li> <li>• Objective measurements regarding substance use disorders that can be applied are e.g. biological markers, screening tools of substance use and functional/performance testing.</li> </ul>



## DRET – P

### Driver Rehabilitation Evaluation Tool – Single Programme Level

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<b>DR PROGRAMME OPERATION</b>		
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Separation of DUI and DUID offenders</b>	<ul style="list-style-type: none"> <li>The vast majority of European DR programmes do not mix DUI and DUID offenders.</li> <li>Additionally, DUI and DUID offenders should not be mixed with other traffic offenders.</li> <li>Most of the programmes do not consider further DUI and DUID subgroups (e.g. novice drivers, re-offenders).</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Separation of non-addicts and addicts</b>	<ul style="list-style-type: none"> <li>Addiction is a common exclusion criterion in most European DR programmes.</li> <li>For offenders using alcohol or drugs in a dependent way, addiction-specific treatment is necessary.</li> <li>In general, DR is an established intervention in about half of the Member States for non-dependent DUI offenders; only a few carry out DR for non-dependent DUID offenders.</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Existence of entry criteria</b>	<ul style="list-style-type: none"> <li>Regarding programme access addicts are mostly not subject of DR programmes for DUI or DUID offenders. They need addiction treatment which differs from the common DR intervention.</li> <li>Special DR services should be provided at least for the following DUI/DUID non-addict offenders:             <ul style="list-style-type: none"> <li>In case of language deficits (e.g. operation in native language);</li> <li>In case of special conditions (e.g. operation in a single intervention).</li> </ul> </li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Existence of exclusion criteria during course operation</b>	<ul style="list-style-type: none"> <li>Detailed conditions for successful completion are defined.</li> <li>Obligations and rights of course participants include at least             <ul style="list-style-type: none"> <li>Sobriety;</li> <li>Non use of drug(s);</li> <li>Punctuality;</li> <li>Active participation;</li> <li>Attendance in all sessions;</li> <li>Confidentiality.</li> </ul> </li> <li>Agreement to these obligations, rights and consequences in case of non-compliance is ensured in a participant-provider contract.</li> </ul>



<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of programme setting</b>	<ul style="list-style-type: none"> <li>Group interventions are the most common DR approach and can be used for a wide range of substance impaired offenders. A lot of appropriate concepts for group interventions exist. The number of participants is limited (preferable 6-10 for group dynamic reasons).</li> <li>Single interventions can be an appropriate DR approach for specific problem constellations although equivalent concepts like for group interventions are rare.</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of trainer/course leader's qualification</b>	<ul style="list-style-type: none"> <li>In two-thirds of the European DR programmes trainer qualification is legally regulated.</li> <li>Minimum standards should at least be defined on provider level</li> <li>Currently, most of the trainers are psychologists with further education.</li> </ul>
<b>PROGRAMME CONTENTS</b>		
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Specification of aims</b>	<p>The aims of the DR programme are clearly defined and include the following as a minimum:</p> <ul style="list-style-type: none"> <li>Attitude and behavioural change to avoid re-offending (e.g. modification of substance consumption patterns);</li> <li>Strategies to avoid re-offending (e.g. development of alternative/new behaviour);</li> <li>Problem awareness regarding substance impaired driving;</li> <li>Basic knowledge (e.g. legal consequences, impairment effects of substances).</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Programme development on a scientific basis</b>	<p>Scientific standards of DR programme development include at least:</p> <ul style="list-style-type: none"> <li>Literature analysis regarding problem behaviour and rehabilitation concept;</li> <li>Explanation of the theoretical concept for attitudinal and behavioural change;</li> <li>Aim(s), contents and intervention steps;</li> <li>Specification of target group(s);</li> <li>Documentation of the programme in a manual.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of principle DR approach</b>	<ul style="list-style-type: none"> <li>Psychological and therapeutic approaches with educative elements are the most promising ones.</li> <li>The concept of European standard group interventions has proven to be effective for offenders without substance use disorders.</li> </ul>



<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports self-observation and reflection</b>	<p>“Self-observation and reflection” is found to be a very relevant success factor in DR interventions according to European DR providers.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports development of alternative/new behaviour</b>	<p>“Development of alternative or new behaviour” is another very relevant success factor according to WP5 research results.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports discussion and confrontation</b>	<p>“Discussion and confrontation” is a further very important success factor of DR programmes.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports an open and trustworthy group climate</b>	<p>“Open and trustworthy group climate” is a relevant success factor of DR programmes as well.</p> <p>Further relevant success factors are</p> <ul style="list-style-type: none"> <li>• Emotional experiencing and involvement;</li> <li>• Achievement of behavioural goals/self control;</li> <li>• Goal setting and commitment to stick to them;</li> <li>• Information;</li> <li>• Emotional verbal/non verbal expressing.</li> </ul>
<b>PROGRAMME EVALUATION</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Evaluation on the DR programme</b>	<ul style="list-style-type: none"> <li>• Regular evaluation studies are a core element to steer service quality.</li> <li>• The evaluation results should be available for the scientific community and the general public.</li> <li>• Evaluation results trigger programme improvements.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of evaluation criteria</b>	<ul style="list-style-type: none"> <li>• The most relevant road safety outcome criterion is recidivism rate. An average reduction rate of 45.5% was observed for European standard group intervention programmes.</li> <li>• Overall participant feedback provides useful information about client satisfaction and achieved changes.</li> <li>• Further outcome and process evaluation criteria can be related to content, method, trainer-participant relation, participant-participant relation, individual change.</li> </ul>

## 6 Conclusions and outlook

The aim of this research part in WP5 Task 2 was the development of an integrated evaluation instrument for DR measures for DUI and DUID offenders documented in the Deliverable 5.2.2 at hand. The development of this tool considered a broad range of information sources including empirical and non empirical ones, above all the results of the entire WP5 research activities on driver rehabilitation (DR) carried out so far. The development was carried out within the WP5 research team supplemented by external experts from different fields of road safety in the so-called cross-checking phase.

The result of the WP5 research activity is DRET, the Driver Rehabilitation Evaluation Tool. With DRET an instrument is available which allows the evaluation of the main technical issues (topics and contents) of DR measures on system and programme level. DRET's special value is that it does not only consider current scientific or theoretical issues but also practical aspects such as (legal) frame conditions, assignment procedure and operation of DR. Moreover it integrates the input of experts from several European Member States.

DRET is a prerequisite for the oncoming WP5 research step on validation of existing DR schemes which will be documented in Deliverable 5.2.4. Besides, it is a research product which can be applied on a broader scale. Several target groups can make use of it: this refers above all those who are working in the field of DR, who are interested in checking their national DR system or institutional DR programme(s) against the DRUID WP5 standard. Further target groups can be those who are doing research in this area, who want to assess and/or compare DR measures in a country or between countries or who just want to be informed about the main elements that constitute DR at present.

Moreover on the longer run, due to the systematic list of relevant DR issues provided by DRET, the tool could be the starting point of a European networking and documentation process. The exchange of experience and knowledge regarding DR by creating a European platform on this issue was emphasized at the WP5 expert workshop in order to advance good practice within the Member States and to support the implementation of DR in Member States without experience in this field yet. An essential element of such a European platform could be the establishment of a European DR programme database<sup>1</sup> by using the DRET topics and contents. This European data base could be an electronic tool for registering and evaluating single rehabilitation programmes. It could be used not only for comparisons with the DRUID model but also as a source of information about the development in Europe, the DR programmes available and where and what areas need more effective measures. The European DR programme database could be launched on the ERSO (European Road Safety Observatory) website.

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<sup>1</sup> The outlook of a European Union DR programmes database, its aims and launching is based on a feedback from Ilona Buttler during the cross-checking phase of DRET.

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## **Annex**

# 1 Expert Workshop on Driver Rehabilitation

## 1.1 Invitation

DRUID WP5 "Rehabilitation", BAST, Brüderstr. 53, 51427 Bergisch Gladbach

Kuratorium für Verkehrssicherheit  
Herrn Vergainer, Frau Künzel  
Schleiergasse 18

1100 Wien  
Austria



Contr.No. TREN-05-FP6TR-507.61320-518404-DRUID

Reference: EU-Project DRUID / Invitation for the Work Package 5 –  
Expert Workshop on Driver Rehabilitation, Feb 29<sup>th</sup> 2008,  
10 a.m. –4 p.m. at the Federal Highway Research Institute (BAST),  
Germany

Date  
18 December 2007

Dear Mr Vergainer & Mrs Künzel,

Reference Number  
U4k-pu-DRUID WP5

first of all we would like to thank you for your efforts to contribute to the DRUID Work  
Package 5 "Rehabilitation" research activities.

Person of Contact  
Dipl.-Psych. Simone Klipp  
+49 2204-43-444

Today, we are pleased to inform you that the process of data collection is nearly finished and  
first results of the research are available. Therefore, we would like to invite you to an expert  
workshop on the presentation and discussion of the outcomes.

This expert workshop will be an opportunity to actively take part in the evaluation of the  
findings. The results of the workshop will be considered in the further research and analysis  
process regarding the rehabilitation of alcohol and drug offenders in Europe.

The workshop will be held

on Friday, 29<sup>th</sup> February 2008 from 10 a.m. to 4 p.m.  
at the Federal Highway Research Institute (BAST) in Bergisch Gladbach, Germany

For further details, please check the programme enclosed.

We kindly ask you to confirm your participation via FAX (+49 2204 43 147, please use this  
sheet – see below) or Email (klipp@bast.de, subject: "Workshop") until Friday, 25<sup>th</sup> January  
2008. Please feel free to contact us if you need assistance for accommodation.

Kind regards

(Birgit Bukasa, WP5 Leader)  
Austrian Road Safety Board

(Simone Klipp)  
Federal Highway Research Institute

DRUID WP5  
Federal Highway Research  
Institute (BAST)  
Dipl.-Psych. Simone Klipp  
Brüderstr. 53

-----  
FAX-CONFIRMATION OF WORKSHOP ATTENDANCE (Fax to +49 2204 43 147)

51427 Bergisch Gladbach  
Germany

We will attend the Expert Workshop with \_\_\_ person(s).

Name of the participating person(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone +49 2204-43-444  
Fax +49 2204-43-147  
Mail to: klipp@bast.de  
www.druid-project.eu



## 1.2 List of participants

The following experts participated in the workshop (see table below):

**Table 4: Participants of Expert Workshop at the Federal Highway Research Institute (BASt) February 29<sup>th</sup> 2008**

Participant	Organisation / provider	Country
Albrecht Martina	BASt	DE
Billard Annick	INSERR	FR
Braun Eveline	KfV	AT
Bukasa Birgit	KfV	AT
Claeys Iris	BIVV	BE
DeVol Don	TÜV Nord	DE
Escrhuela Michael	BASt	DE
Gabor Marian	IVT Hö	DE
Heinemann Doreen	BASt	DE
Johansson Stig-Åke	Swedish Prison & Probation Service	SE
Kalwitzki Klaus-Peter	AFN	DE
Klipp Simone	BASt	DE
Kluppels Ludo	BIVV	BE
Kollbach Birgit	Dekra Akademie	DE
Krohn Brigitte	AFN	DE
Meesmann Uta	BIVV	BE
Merelle Rob	GGZ	NL
Nechtelberger Franz	AAP	AT
Nechtelberger Martin	AAP	AT
Panosch Elisabeth	KfV	AT
Salomons Gondelijn	CBR	NL
Schulze Horst	BASt	DE
Stengl-Herrmann Doris	Pluspunkt	DE
Veltgens Ulrich	Impuls	DE
Wenninger Ulrike	KfV	AT

## 1.3 Agenda

DRUID Work Package 5 “Rehabilitation”



### International Expert Workshop on Driver Rehabilitation

Contr. No. TREN-05-FP6TR-S07.61320-518404-DRUID

Friday, 29<sup>th</sup> February 2008 at the Federal Highway Research Institute (BAST)  
Brüderstr. 53, 51427 Bergisch Gladbach, Germany

9 <sup>30</sup> -10 <sup>00</sup>	<i>Registration</i>
10 <sup>00</sup> -11 <sup>50</sup>	<i>Morning session: Sofie Boets (IBSR) &amp; Simone Klipp (BAST)</i>
10 <sup>00</sup> -10 <sup>15</sup>	<b>Welcome &amp; DRUID overview</b> Dr. Horst Schulze / Federal Highway Research Institute (BAST) Head of the Department “Behaviour & Safety” & DRUID-Coordinator
10 <sup>15</sup> -10 <sup>30</sup>	<b>DRUID’s WP 5 “Rehabilitation” – aims &amp; expectations</b> Dr. Birgit Bukasa / Austrian Road Safety Board (KfV) Leader of WP 5
10 <sup>30</sup> -11 <sup>00</sup>	<b>Literature review - presentation with discussion</b> Sofie Boets & Uta Meesmann / Belgian Road Safety Institute (IBSR)
11 <sup>00</sup> -12 <sup>00</sup>	<b>Provider questionnaire survey - presentation with discussion</b> Dr. Eveline Braun / Austrian Road Safety Board (KfV)
12 <sup>00</sup> -13 <sup>15</sup>	<i>Lunch break</i>
13 <sup>15</sup> -16 <sup>00</sup>	<i>Afternoon session: Dr. Birgit Bukasa (KfV)</i>
13 <sup>15</sup> -13 <sup>45</sup>	<b>Participant feedback study - presentation with discussion</b> Simone Klipp / Federal Highway Research Institute (BAST)
13 <sup>45</sup> -14 <sup>10</sup>	<b>In-depth analysis “Recidivism” - presentation with discussion</b> Dr. Ulrike Wenninger / Austrian Road Safety Board (KfV)
14 <sup>10</sup> -14 <sup>20</sup>	<b>Quality management - presentation with discussion</b> Simone Klipp / Federal Highway Research Institute (BAST)
14 <sup>20</sup> -14 <sup>50</sup>	<i>Coffee break</i>
14 <sup>50</sup> -15 <sup>00</sup>	<b>Workshop’s minutes &amp; collection of additional issues</b>
15 <sup>00</sup> -15 <sup>50</sup>	<b>Overall discussion on the results</b>
15 <sup>50</sup> -16 <sup>00</sup>	<b>Summary of the workshop &amp; closing remarks</b> Dr. Birgit Bukasa / Austrian Road Safety Board (KfV) & Simone Klipp / Federal Highway Research Institute (BAST)

## **1.4 Discussions after each presentation**

### **Literature review**

#### **Result “recidivists are of young age”**

A participant was surprised by this result as in his experience, recidivists are rather older.

A WP5 team member explained the selection criteria of this part of the literature review which might have influenced this result.

Another WP5 team member added that from the practical experiences in AT recidivists are also rather older (around 38 years) and she emphasised that these were the results of the literature review, and that the input from the practical field is very important.

#### **Definition of “young”**

A participant asked for the definition of “young” in this context.

A WP5 team member explained that “young” was defined as being younger than 30 years at the moment of the first offence. It must be emphasized that the literature review mainly included studies from North America as publications from Europe which were in line with WP5 team inclusion criteria were rare. This might have had an impact on the outcome. But the inclusion criteria for “follow-up study” were defined as having baseline data from the first offence and having recidivism data after a certain period. So, if the baseline data of those who re-offended were compared to those who did not, it was obvious that the recidivists were significantly younger at baseline; therefore the age at the moment of recidivism was of course also older.

### **Provider questionnaire survey**

#### **Diversity of the national legal systems (Form A)**

A participant wanted to add that the conclusions per country might not allow generalizations, as different national legal systems might determine different aims. Therefore, best practice recommendations on an EU level have to bear in mind the heterogeneity of the legal systems on the national level.

A WP5 team member stated that on an EU level the question of best practice on DR could also be: “Which legal system do we need in order to carry out DR?”

Another WP5 team member added that the results of DRUID WP5 would be taken into account in the work of the oncoming WP6 (Work Package on License Withdrawal).

#### **“Alcolock” (ignition interlock system)**

A participant asked if any DR provider was actually using Alcolock systems.

A WP5 team member answered that no provider reported to use these devices. But a question about it was included in the provider survey and also in the whole research plan on the state of the art in DR as it was seen to be an important issue which has to be considered.

Another WP5 team member added that the EU did not have much experience with Alcolock. But there were some providers using it in combination with RH (e.g. France: one programme; Belgium: one study project). The Swedish programme, which included strict medical supervision and support, was evaluated and showed successful results. From the research which was done so far it can be stated that ignition interlock systems seem to be efficient as long as they are installed, but without any rehabilitative support, a long term effect which persists after de-installation must be doubted. More research is needed to evaluate the long-term effects of ignition interlock systems in combination with rehabilitation.

A WP5 team member asked the Belgium participant if he could summarize the results of the mentioned Alcolock study.

The participant firstly corrected that the research project of the IBSR studied the practical realisation of interlock systems, not in first line the effect of recidivism. The results showed that an ignition interlock system could help the offender to control his/her behaviour; the long term effects on recidivism were unknown. The participant pointed out, that it was very important to keep ignition interlock systems in mind and not ignore this topic as this kind of systems was very popular among politicians. He recommended that DR providers should search on combinations of interlock and DR.

A WP5 team member added that the information on the recorder of the ignition interlock system also provided the possibility to study recidivism on a basis, which does not have to rely on self-reported data. Further, it needed to be mentioned that in the Belgium study it was almost shocking to see that there were many attempts to start the car while being under the influence of alcohol. This means the devices worked successfully and prevented DUI in all cases.

Another WP5 team member asked the Belgium provider if he thought that Alcolock systems might be good for certain types of offenders.

The Belgium participant stated that the main advantage of an ignition interlock system was that the offender could stay mobile. It seemed to be good for offenders, who had a serious alcohol problem. It helped them to control themselves. However, there were many practical problems connected to the implementation of ignition interlock systems (e.g. circumventing issues or costs of service stations).

Another WP5 team member added that in practice the recorded information might be very helpful for a counsellor as the way the information was gained is very objective and the counsellor had not only to rely on self reported data. She furthermore pointed out the advantage of remaining mobile with an ignition interlock systems. The idea of Alcolock systems aroused originally in the USA, where DUI is sanctioned very heavily, e.g. by impounding the plate or even the vehicle. Thus, the whole family, which uses the car, is immobilized. Furthermore, the withdrawal of a driving licence could lead to secondary delinquency like driving without a license.

A French participant added that the experiences on ignition interlocks in France showed that the costs of such a system were a major problem as the offender had to carry these costs by him/herself. This meant that a certain type of offender could use the Alcolock system, namely the one who could afford it.

A WP5 team member asked, if an interlock system was not contra-productive to traditional rehabilitation aims (e.g. self-evaluation).

The Belgium participant answered, that this was the typical fear of a psychologist.

Another WP5 team member added that the literature review showed that the standard group interventions had shown to reduce recidivism by the “marginal 50%”, but this means there were still 50% left for which these interventions did not work. Probably interlocks are a way to support effectiveness. No studies have been carried out on the long-term effects of ignition interlocks in combination with RH. The added value of interlocks needs to be evaluated in particular, as the data of the system for example might be used to confront the offender in the course. In addition to that, there is research, which has shown that the data from the interlock recorder could be used to predict which offenders will recidivate. Results of a study conducted by Marques and his colleagues showed that if there were many attempts to start the car with an elevated BAC in the morning, the recidivism rate was high.

A German participant pointed out that at present ignition interlock systems do not play any role as it is not common in practice in Germany, but this should not be interpreted as it would not be of importance in case it would be common in practice.

A Belgium participant stated that in his opinion, ignition interlock systems should be combined with DR in case one wanted to achieve long-term effects.

### **Analysis of change process and components in DR courses (“participant feedback study”)**

#### **Clarity of survey questions for the course participants**

A participant noticed that some of his course participants had difficulties in understanding the questions. They could sometimes not distinguish the questions from each other.

A WP5 team member answered that this study showed some methodological limitations. Yet, the main question was how to proceed with these limitations in the interpretation of the results. A possibility could be to concentrate on answers, which for example were showing variations in the answers shape (not only state “agree” on all questions).

Another participant pointed out that it was problematic to sort out questions when the differences were too low, as maybe the participants really thought that the course was brilliant in all aspects.

The WP5 team member clarified that she did not mean to sort those out, but to carry out a specific analysis regarding the variations and that the WP5 team of course still had to analyse the diamond of change-elements.

The French participant added that in France the used answer scale is normally the other way around, starting with disagree and ending with agree.

A WP5 team member said that it was only paid attention to the use of a four-item scale but not to national scientific traditions.

Another WP5 team member added that no significant effect in the opposite direction was observed in the French outcomes. It was emphasised that it was very important that the course leaders did not see the results in order to keep the chance of social desirable answers low.

A WP5 team member pointed out that based on this study no results on long-term effects could be drawn. Some items might have been difficult to answer and the fine-tuned meaning of the items was sometimes maybe not understood by the participant.

Another WP5 team member added that pre-tests with course participants had been carried out in order to check these issues and that corresponding correction had been made.

### **In-depth analysis on recidivism reasons**

#### **Result “small number of female recidivists”**

A participant mentioned the small number of female recidivists.

A WP5 team member said that this was actually not surprising, as it fitted to the results of the literature analysis. The in-depth analysis on recidivism first looked for recidivists, and the amount of female recidivists was also according to the literature very small.

#### **Cohen’s effect sizes within the regression analysis**

A WP5 team member mentioned regarding the results that the effect sizes measured as Cohen’s *d* were all lower than 0.3, actually meaning that the effects were only small.

#### **Information concerning the refusal of a breath test**

A WP5 team member asked which legal consequences follow if a breath test was refused in Austria.

A WP5 team member from Austria responded that a refusal of the breath test is equal to driving with a BAC of 1.6 ‰ or more leading to a driver assessment and to the obligation of participating in a DR course. In case the breath test is five times not valid it is also regarded as refusal.

### **Study on quality management**

### **Question “why the provider from the Netherlands did not indicate to have QM”**

A WP5 team member asked the participant from the Netherlands, why they had stated that they did not use QM, as most of the literature on QM in the context of DR addiction treatment actually came from the Netherlands. Thus, there seemed to be a big gap between quality assurances in addiction treatment compared to DR. In addition to that, she remembered when doing a research project on international DR systems three years ago, to having got the answer that they were already working on the QM in EMA.

The participant from the Netherlands answered that all institutes on care and addiction had to have nation wide certificates. Thus they need to have a quality system (every course is validated and every trainer gets a profile based on the feedback interviews of the participants).

A WP5 team member pointed out that literature shows a lot of QM in addiction treatment in the NL.

The participant from the Netherlands answered that addiction-care had a lot of QM.

Another WP5 team member asked whether this meant that the DR programmes were evaluated on their effectiveness, but that no QM was done.

Another participant from the Netherlands answered that they called it a monitoring system. It is actually very similar to the study questionnaire of DRUID WP5 and is also based on the TTM. The national law defines many quality criteria of the trainers. The providers do a lot, but they do not use the official ISO or EN.

The WP5 team member summarized that one could say that it was an internal QM and the participant from the Netherlands agreed. The WP5 team member furthermore stated that although the providers had not stated using QM in the questionnaire survey, the Netherlands internal QM system would be considered from now on in the WP5 research part on this specific issue.

### **Overall discussion and general comments**

#### **Publication and dissemination of results**

A participant expressed that he was very happy to hear the results and that he hoped that these results were transferred further.

A WP5 team member said that so far the DRUID WP5 deliverables were all not for public, but the DRUID WP5 team would try to get the approval to publish them.

The audience reacted surprised and expressed a strong hope that this information would get published.

Regarding the provider survey, a participant asked if it was possible that the participating provider could get the presented results.

A WP5 team member answered, that this was not possible at the moment; in case this would change, the DRUID WP5 team would of course provide the participating providers with this information. She asked for patience, as the whole DRUID project would still run until 2010.

Another WP5 team member stressed that it was very important to disseminate the results to participating providers and that it should be one of the next steps of DRUID WP5 to ask the EU Commission for permission to disseminate this information.

The DRUID coordinator asked the attending providers for their patience; the BAST was contracted by the EC and the EC wanted to use it in the big, overall results of DRUID. But it was emphasised that he would check with the scientific officer in Brussels if it was possible to get a permission to disseminate the results to the participating providers. So far, the DRUID WP5 deliverables were no public ones and therefore could not be downloaded from the DRUID homepage.

A participant stated that they were very interested in the results of DRUID WP5 and that one could learn a lot in sharing this kind of knowledge. He suggested that a recommendation of the WP5 should be to install a European platform for exchanging this information.

Regarding the analysis of change process and components study in DR courses, a German participant mentioned that a German course was applied for both voluntary and non voluntary participation.

A WP5 team member said that this issue had to be taken into account for all type II courses (special advanced driver improvement courses according to §§36 /§43 FeV) as the participants which attended the course due to §43 FeV were actually voluntary participants. The idea of how to identify them was to recheck the database for all these clients and to sort out the participants who did not cross to have their license on probation and classify them as type III course (voluntary courses without any legal base) participants.

Regarding QM a WP5 team member asked if any provider which had stated that they were a non-profit organisation was attending the workshop. As the corresponding provider had left the workshop earlier no further discussions were possible; but apparently, the terminology on legal entity of the organisation caused misunderstandings.

In general, German participants mentioned some problems with the English language, as they did not suppose the workshop being held in English. Hence, this will be announced officially on the invitation in case the international exchange will be continued on that level.

## 2 International Symposium on Driver Rehabilitation Programmes

### 2.1 Invitation



The EU Integrated Project DRUID invites you to the:

### ***DRUID Symposium on Rehabilitation Programmes for drivers under the influence of alcohol and drugs***

**16 May 2008, Thessaloniki, Greece**

The Integrated Project DRUID (Driving under the Influence of Alcohol, Drugs and Medicines) deals with the scourge of impaired driving due to psychoactive substances. DRUID is going to find answers to questions concerning the use of alcohol, drugs or medicines that affect people's ability to drive safely. The aim is to derive EU-wide solutions. ([www.druid-project.eu](http://www.druid-project.eu))

Starting from the 1970ies certain Member States have adopted specific rehabilitation programmes, recognising the lack of effectiveness of suspension of driving license, fines and/or imprisonment for drivers having committed serious offences or accidents while being impaired due to alcohol or drugs. Today, a variety of different rehabilitation schemes, above all psychological programmes focusing on the individual problem behaviour, are available and there exists a large amount of knowledge and experience in some Member States regarding rehabilitation schemes. The WP5 research focus is to increase knowledge as regards rehabilitation of drivers with drunk-driving or drug-driving offences, as well as to provide fundamentals for establishing adequate and effective rehabilitation measures throughout Member States according to uniform defined criteria and quality standards.

The target of the DRUID WP5 Symposium is to transfer of knowledge on driver rehabilitation programmes for drink-driving and drug-driving offenders to the Greek context as a case study on countries not having relevant measures for these problem groups. We are therefore inviting colleagues and experts to this symposium to discuss the issue, to exchange opinions, to transfer the knowledge from other countries and to propose a driving rehabilitation programme adapted to the Greek framework. We think this may be a unique opportunity to exchange views on this important topic.

Topics to be addressed:

- Alcohol/drug related accidents in Greece
- Enforcement in Greece
- The problem of impaired drivers
- Results from empirical studies
- Existing Driver rehabilitation programmes in EU
- Quality assurance for driver rehabilitation
- Existing treatment structures in Greece
- Towards establishing rehabilitation programmes in Greece

The Symposium involves introductory speeches, and oral sessions.



**Venue:**

Centre for Research and Technology Hellas/ Hellenic Institute of Transport (CERTH/HIT). The Institute is situated at Thessaloniki,  
6 km Charilaou – Thermi Rd, Thermi.

**Local Organiser:** CERTH/HIT.

**Chair of local organising committee:** Dr. Evangelos Bekiaris.

**Participation:** Free of charge

**Deadline for registrations:** 7<sup>th</sup> May 2008.

**For more information and registration please contact:**

Ms Lila Gaitanidou ([lgait@certh.gr](mailto:lgait@certh.gr))

**DRUID website:** [www.druid-project.eu](http://www.druid-project.eu)

## 2.2 Programme

### Programme International Symposium in Thessaloniki

Time	Item	Presenter	Name
09:00 – 09:30	Registration		
09:30 - 09:40	Welcome	CERTH/HIT	E.Bekiaris
09:40 – 09:50	Overview of DRUID Project	BASt	H.Schulze
09:50 – 10:00	Driver Rehabilitation within DRUID	KfV	B.Bukasa
10:00 – 10:30	Literature analysis on rehabilitation for alcohol and drug offenders	IBSR	S.Boets / U.Meesmann
10:30 – 11:00	Survey of rehabilitation providers in Europe	KfV	E.Braun
11:00 – 11:30	<b>Coffee Break</b>		
11:30 -12:00	Feedback study of rehabilitation course participants	BASt	S.Klipp
12:00 – 12:30	In depth analysis on reasons for recidivism	KfV	U.Wenninger
12:30 – 13:00	Quality assurance for rehabilitation measures	BASt	M. Escrihuela
13:00 – 14:00	<b>Lunch Break</b>		
14:00 - 14:20	Classification of drugs in Greece	CERTH/HIT	E.Bekiaris / L.Gaitanidou
14:20 – 14:40	Existing treatment and rehabilitation structures in Greece	<b>Drug rehabilitation consultant</b>	A.Laliotis
14:40 – 15:10	<b>Coffee Break</b>		
15:10 – 15:30	Towards establishing driver rehabilitation programs- case study: Greece	CERTH/HIT	E.Bekiaris / L.Gaitanidou
15:30 – 16:30	Final discussion	All	Moderator: B.Bukasa

## **2.3 Presentations at the Symposium on Driver Rehabilitation**

### **2.3.1 State of the Art - Literature Review**

In the following the power point presentation file is documented.



DRUID Symposium on Rehabilitation Programmes for Drivers under the Influence of Alcohol and Drugs

16<sup>th</sup> May 2008  
CERTH/HIT, Thessaloniki, Greece

**State of the Art**  
**Literature Review**

Uta Meesmann & Sofie Boets (IBSR)

The image shows a slide from a presentation. At the top left, the text reads 'DRUID Symposium on Rehabilitation Programmes for Drivers under the Influence of Alcohol and Drugs'. To the right of this text is a logo for DRUID, which consists of a stylized pink elephant head silhouette with the word 'DRUID' in black capital letters above it. Below the main title, the date '16<sup>th</sup> May 2008' and the location 'CERTH/HIT, Thessaloniki, Greece' are listed. In the center of the slide, the title 'State of the Art Literature Review' is displayed in large, bold, black font. Below this, the authors 'Uta Meesmann & Sofie Boets (IBSR)' are listed. In the bottom right corner, there is a logo for IBSR-BIVV, which is a blue square containing a white circular graphic with the text 'IBSR-BIVV' in white.

## Literature review



### Overview of the presentation

- Methodology
- Summary of the results per main chapter
  1. Identification of different DUI/DUID offender **types**
  2. Review of existing DUI/DUID **assessment** procedures
  3. Review of existing DUI/DUID **rehabilitation** measures
  4. Review of **addiction treatment** and options for dependent DUI/DUID offenders



Literature Review  
Uta Meesmann & Sofie Boets & (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16<sup>th</sup> May 2008

## Methodology



- The Literature review is mainly based on publications in national and international scientific journals
  - This includes systematic reviews, meta-analyses and primary studies.
  - The search strategies are documented and are attached in the annex of the deliverable.
- Furthermore, information of field experts in- and outside the DRUID WP5 team is included
  - Which was particularly helpful in unexplored scientific fields. It included unpublished literature.



Literature Review  
Uta Meesmann & Sofie Boets & (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16<sup>th</sup> May 2008



## 1. Identification of DUI/DUID Offenders Types



## 1. Identification of DUI/DUID Offenders Types



- Specific characteristics of DUI/DUID **offenders**
  - Socio-demographic characteristics
  - Consumption habits
  - Driving related characteristics
  - Psychological characteristics
  - DUI/DUID offender clusters
  - Environmental factors
  - Decision making theories and models
  - Motivation for change
  
- General characteristics of DUI/DUID **recidivists**
  - Socio-demographic variables and their impact on recidivism
  - Consumption habits and recidivism risk
  - Driving history as a predictor of recidivism
  - Personality characteristics connected to recidivism
  - Stages of change and recidivism risk
  - Concept of the "hard core drinking driver"



# 1. Identification of DUI/DUID Offenders Types



## Specific characteristics of DUI/DUID offenders

- **Socio-demographic variables**
  - Male gender
  - Young age
  - Lower educational or professional level
  - Lower socio-economic status
  - Single or separated civil state
- **Traffic related variables**
  - Prior traffic offence records



Literature Review  
Uta Meesmann & Sofie Boets & (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

# 1. Identification of DUI/DUID Offenders Types



## Specific characteristics of DUI/DUID offenders

- **Consumption habits**
  - heavy to problematic substance use (major risk factors)
  - first offenders are often moderate drinkers
  - co-morbidity of substance use problems with other clinical disorders
- **Personality traits**
  - e.g. sensation seeking or aggression
  - general risky life style
  - low self-control and poor coping styles
- **Decision making processes**
  - deviant attitudes
  - poor knowledge
  - low risk perceptions
  - certain social norms and expectations



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 1. Identification of DUI/DUID Offenders Types



### Identified characteristics of DUI/DUID recidivists

- Socio-demographic variables
  - Male gender
  - Young age
  - Lower educational level
  
- Traffic related variables
  - Prior traffic offence records



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 2. Review of DUI/DUID Assessment Procedures



## 2. Review of DUI/DUID Assessment Procedures



- Multidisciplinary approach
- Different scopes of DUI/DUID assessment procedures
  - Selected current approaches in Europe (AT, BE, FR, DE, HU)
  - Selected current approaches outside Europe (USA, CA)
- DUI/DUID assessment measures and tools
  - Traffic psychology related measures and tools
  - Medical related measures and tools
  - Model of change related tools



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 2. Review of DUI/DUID Assessment Procedures



- An assessment is necessary:
  - to identify different types of DUI/DUID offenders,
  - to evaluate the fitness to drive,
  - and to provide information for rehabilitation planning.
- It is mostly a multidisciplinary approach, covering:
  - medical,
  - psychological and social aspects.
- Review of different country approaches in & outside Europe:
  - National guidelines on DUI/DUID assessment exist.
  - The country approaches vary widely regarding the criteria, procedure and the link of the assessment with further rehabilitation planning.
  - In Europe DUI/DUID assessment is primarily carried out in the frame of the fitness to drive decision.
  - The authors of the EU project ANDREA recommend a standardized screening/assessment procedure before rehabilitation course participation and so do the national guidelines of the USA and CA.
- In general the context of an assessment determines the selection of tools and the whole procedure.



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 2. Review of DUI/DUID Assessment Procedures



### Literature analysis of measures and tools

- A broad range of DUI/DUID assessment measures and tools exists.
- Many are not evaluated on the DUI/DUID population, as they were developed and applied for clinical diagnoses.
- *Traffic psychology* led to the development of assessment tools which are fine-tuned to the specific problems of DUI/DUID offenders, and which are validated on this population.
- Regarding the fitness to drive assessment the literature suggests combining several screening/assessment tools.
- No tool can function as a stand alone instrument to evaluate DUI/DUID offenders' fitness to drive sufficiently.
- In general DUI/DUID assessment should be carried out close to the offence.



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 3. Review of DUI/DUID Rehabilitation Measures





### 3. Review of DUI/DUID Rehabilitation



- History of DUI/DUID RH in Europe
- **Different scopes of DUI/DUID RH procedures in- and outside Europe**
- **Effectiveness of DUI/DUID RH measures**
- Different RH approaches: alcohol ignition interlock devices as structural interventions for DUI offenders



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

### 3. Review of DUI/DUID Rehabilitation



#### Different scopes of current procedures in- & outside Europe

- Within Europe no uniformity regarding the **implementation and application** of DUI/DUID rehabilitation in the national contexts exists.
- Some countries provide national guidelines on DUI/DUID RH.
- USA and CA have national guidelines for implementation into the legal system.
- Countries in Europe show different approaches of **RH programme access**, ranging from voluntary, to recommended, up to obligatory participation.
- In the USA and CA: screening or assessment as necessary to decide on an appropriate intervention.



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

### 3. Review of DUI/DUID Rehabilitation



#### Review of DUI/DUID RH effectiveness studies

- The review identified 61 studies on the topic.
- European standard group intervention programmes show an average recidivism reduction rate of 45.5% (36 studies and 2 reviews).
- A large variation of recidivism reduction rates was observed (15% - 71%).
- The interventions in general get positive participant feedback.
- The interventions lead to additional individual changes (such as enhanced knowledge and positive attitude).
- Only 1 study on DUID RH was identified by the literature search.
- Methodological limitations of the studies (e.g. lack of control group; different time periods).



Literature Review  
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DUI/DUID, Thessaloniki, 16th May 2008



### 4. Review of Addiction Treatment & Options for dependent DUI/DUID Offenders



## 4. Review of Addiction Treatment & Options for dependent DUI/DUID Offenders



- Psychosocial treatment strategies
- Pharmacological treatment strategies
- Treatment effects on alcohol and drug dependence
- Discussion of the results as options for dependent DUI/DUID offenders



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 4. Review of Addiction Treatment & Options for dependent DUI/DUID Offenders



- Alcohol and drug dependent drivers are, by EU legislation, not considered fit to drive (Directive 91/439/EEC).
- Psychosocial treatments of alcohol and drug dependent patients are effective interventions to support the maintenance of abstinence and to lower the amount and frequency of alcohol and drug consumption.
- No strategy could be identified to be superior in general.
- It is important to consider characteristics of the patient, predominant symptoms of the dependence, and also motivation aspects while matching patients and treatment approaches.
- A combination of different treatment strategies provides the advantage of simultaneously addressing different factors and levels of influence.



Literature Review  
Uta Meesmann & Sofie Boets (IBSR)

DRUID Symposium on Rehabilitation Programmes for  
DUI/DUID, Thessaloniki, 16th May 2008

## 4. Review of Addiction Treatment & Options for dependent DUI/DUID Offenders



- In general, the relapse-rates of alcohol or drug dependent patients are high, even after successful completion of addiction therapy.
- Pharmacological treatment is, according to the existing literature, often used as an adjunctive approach to psychosocial therapy.
- The addiction-specific approach is a fundamental element within the rehabilitation of dependent DUI/DUID offenders. This could be realized in two ways:
  1. the allocation of alcohol or drug dependent DUI/DUID offenders to addiction treatments or
  2. the integration of addiction specific treatment strategies in the DUI/DUID rehabilitation treatment.



Literature Review  
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DUI/DUID, Thessaloniki, 16th May 2008



Thank you for your  
attention!



**Uta Meesmann & Sofie Boets**  
**(IBSR)**



## 2.3.2 State of the Art - Provider Questionnaire Survey

In the following the power point presentation file is documented.



The slide features a white background with a thin pink horizontal line near the top. On the right side, there is a pink logo consisting of a stylized elephant head silhouette with the word "DRUID" in bold black letters above it. The main text on the left side reads: "International Symposium on Driver Rehabilitation DRUID WP 5", "16th May 2008", and "CERTH, Thessaloniki, Greece". In the center, the title "Provider questionnaire survey" is written in a large, bold, black font, followed by the authors "Eveline Braun & Birgit Bukasa (KfV)" in a smaller black font. At the bottom, there is a pink horizontal line. Below this line, on the left, are the European Union flag and a blue logo with a white stylized '6'. On the right, there is the "KfV" logo with a small eagle icon and the text "KfV" in bold black letters.

International Symposium  
on Driver Rehabilitation  
DRUID WP 5  
16th May 2008  
CERTH, Thessaloniki, Greece

**Provider questionnaire survey**  
Eveline Braun & Birgit Bukasa (KfV)

## WP5.1 - Provider questionnaire survey



### Aim of the survey

- Actual and detailed information on all relevant parameters regarding the conduction and realization of DR in European countries;
  - To get an overview of organisational, structural and procedural realities in this field;
  - To receive an updated list on current DR programmes; including information on their practices, their approaches, contents, requirements for trainers and participants as well as their scientific background and evidence.
- ⇒ giving a picture of State of the Art regarding DR in Europe



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Questionnaire development

- **Starting points:**  
Prior research in this area  
(e.g. EU-Project ANDREA; TNO & Traffic Test Questionnaire „Driver Improvement“; KfV questionnaire on „Model Level“)
  - **DRUID Provider Questionnaire** consisted of 3 questionnaire forms:
    - PQ Form A: dealing with organisational issues
    - PQ Form B: dealing with programme information
    - PQ Form C: dealing with prior driver assessment/screening
- ⇒ development of electronic versions



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Conduction of survey

- Acquisition of RH providers on EU level
- Contacting
- Forwarding electronic templates of PQ Forms A, B and C
- Support by DRUID WP5 team for filling in the questionnaire
- Data collection:  
all PQ filled in and submitted electronically  
from August 2007 to December 2007



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form A Results: Organisational issues



**Provider Questionnaire  
on Driver Rehabilitation (DR)**

**Form A  
Organisational Issues**

**EU Project DRUID**

Driving under the influence of alcohol, drugs and  
medicines

**Workpackage 5: Rehabilitation**

August 2007

Contract No. TREN - 05-FP6-RTN-007-61020-810404-DRUID



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

#### Dimensions covered within this questionnaire form:

- Legal entity of provider, local frame and sites for carrying out DR
- Starting year
- Level of quality management
- Number of trainers, types of courses, if specific services, if treatment programmes for addicts
- Availability of assessment procedures prior to DR
- Evaluation of frame conditions regarding DR



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## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

Table 12: Number of participating DR providers

Country	DR providers	
	Total number in country	Participating in DRUID
Austria	9	9
Belgium	2	2
France	not known	7
Germany	10	8
Hungary	1	1
Italy	1	1
Netherlands	1	1
Poland	1	1
Portugal	1	1
Sweden	not known	1
Switzerland	20-25	1
United Kingdom	not known	14
<b>Total number</b>	-	<b>47</b>

At present 12 European countries provide DR measures and participated in DRUID. Additionally Luxembourg and Denmark conduct DR; Spain started recently.



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## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

Table 13: Number of questionnaire forms received per country

Country	submitted questionnaires		
	Form A	Form B	Form C
Austria	9	21	0
Belgium	2	5	1
France	7	8	7
Germany	7	28	3
Hungary	1	3	1
Italy	1	1	1
Netherlands	1	1	0
Poland	1	1	0
Portugal	1	3	0
Sweden	1	1	1
Switzerland	1	1	1
United Kingdom	14	14	0
<b>Total number</b>	<b>46</b>	<b>87</b>	<b>15</b>



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

Table 15: Legal entities of providers per country; multiple answers possible; number of providers

Country	Participating providers in DRUID	Non governmental organisation	Private company with commercial aims	A private non profit organisation	Public service, governmental or community based	(a part of) A hospital or health centre	other
Austria	9	9	6	8	2		
Belgium	2	2	1	1	1		
France	7	4	2	5			
Germany	7	4	6	1			
Hungary	1				1		
Italy	1				1	1	
Netherlands	1				1		
Poland	1		1				
Portugal	1	1		1	1		
Sweden	1				1		
Switzerland	1			1			
United Kingdom	14	4	3	9	5		3
<b>Total</b>	<b>46</b>	<b>24</b>	<b>19</b>	<b>21</b>	<b>13</b>	<b>1</b>	<b>3</b>



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

Table 17: Local frame regarding DR services, number of providers and numbers of regions where services are restricted to

Country	Participating providers in DRUID	nationwide service	Service restricted to certain federal states/areas	number of areas / federal states
Austria	9	9		
Belgium	2	2		
France	7		7	1-4
Germany	7	4	3	1-8
Hungary	1	1		
Italy	1		1	1
Netherlands	1	1		
Poland	1	1		
Portugal	1	1		
Sweden	1	1		
Switzerland	1	1		
United Kingdom	14		13	1-15
<b>Total</b>	<b>46</b>	<b>21</b>	<b>23</b>	<b>1-15</b>



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form A results: Organisational issues

- At least 1413 trainers work in the field of DR in Europe. The number of trainers per organisation varies from 3 to 98 trainers.
- The number of different DR programmes per organisation varies between 1 to 7; mostly 1 to 3 different programme types are offered.
- In the time period from 1991 to 2000 most of participating providers started (n=31).
- Most of the providers have got own rooms available for conducting DR, many also use seminar centres or community facilities.
- The majority of the providers do not offer services for alcohol or drug dependent offenders.  
(only 8 do for alcohol and 6 for drug dependent offenders)



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form B results: Programme information



#### Provider Questionnaire on Driver Rehabilitation (DR)

#### Form B Programme Information

EU Project DRUID

Driving under the influence of alcohol, drugs and  
medicines

Workpackage 5: Rehabilitation

August 2007

Deliverable 5.1.1 - DRUID-5.1.1-001



International Symposium on Driver Rehabilitation, 16<sup>th</sup> May 2008



## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

#### Dimensions covered within this questionnaire form:

- Access to programme (participation mode, who imposes participation, consequences of participation)
- Target group of programme (exclusion criteria)
- Programme setting and structure
- Trainer (profession, additional education)
- Costs; course completion
- Scientific background of the programme
- Aims and contents of programmes, materials for participants
- Factors for success and evaluation



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## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

Table 33 and 34: Number of different documented programmes and type of documented programmes

Country	Number of participating providers in DRUID	Number of documented programmes	DR programmes for		
			DUI	DUID	DUI, DUID and others mixed at regular level
Austria	9	21	13	8	
Belgium	2	5	2	1	2
France	7	8	2		6
Germany	6	26	13	11	4
Hungary	1	3	3		
Italy	1	1	1		
Netherlands	1	1	1		
Poland	1	1	1		
Portugal	1	2	2	1	
Switzerland	1	1	1		
Sweden	1	1			1
United Kingdom	14	14	14		
<b>Total</b>	<b>47</b>	<b>87</b>	<b>53</b>	<b>21</b>	<b>13</b>



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## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

Mode of participation:

- About half mandatory programmes - nearly half voluntary programmes
- Participation most often imposed by licensing authorities
- Mostly participation is the necessary condition for re-licensing or license re-instatement



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## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

#### Target groups and programme conduction :

- Majority of programmes does not mix alcohol and drug offenders
- Mostly no further distinction of DR subgroups
- Majority of programmes designed as group interventions
- Exclusion criteria:
  - prior to DR:
    - addicted persons; drivers with communication problems
  - during course:
    - acute intoxication; missing co-operation; delay, aggressiveness, absences



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## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

**There are legal regulations** on following aspects of the submitted 87 programmes:

- Programme setting (50 programmes);
- Programme's aims (46 programmes);
- Costs (32 programmes);
- Successful course completion (58 programmes);
- Regulations for trainers'/course leaders' qualification (59 programmes);

In most of the cases the trainers are psychologists; very often an additional education or training is required.



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## WP5.1 - Provider questionnaire survey



### Form B results: Programme information

- **Scientific background:** many programmes are psychological-therapeutically based and numerous have a mixture of theoretical approaches as scientific background.
- **Major aims of programmes:** attitude and behaviour change, but also further stabilisation of new behaviour, consciousness raising, establishment and strengthening motivation.



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## WP5.1 - Provider questionnaire survey



### Form C results: Prior driver assessment/screening



**Provider Questionnaire on  
Driver Rehabilitation (DR)**

**Form C  
Prior Driver Assessment or  
Diagnostic Screening**

**EU Project DRUID**

Driving under the influence of alcohol, drugs and  
medicines

**Workpackage 5: Rehabilitation**

August 2007

Contract No. TREN - 05-FP6TR-007 61326-01494-DRUID



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## WP5.1 - Provider questionnaire survey



### Form C results: Prior driver assessment/screening

#### Dimensions covered within this questionnaire form:

- Psychological and/or medical approach of assessment/screening;
- Tools used (Interview, physical examination, performance-functional testing, screening tools on substance use disorders, ... );
- Qualification of persons carrying out this assessment/screening.



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## WP5.1 - Provider questionnaire survey



### Form C results: Prior driver assessment/screening

Countries where prior driver assessment/screening is carried out in order to assign offenders to a specific DR:

Belgium, France, Germany, Hungary, Italy, Sweden and Switzerland.



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## WP5.1 - Provider questionnaire survey



### Form C results: Prior driver assessment/screening

#### Applied tools:

1. Interviews most often applied
2. Screenings for substance misuse: AUDIT, CAGE (mostly for DUI)  
External medical/therapeutic information: laboratory results, opinion from external expert
3. Biological markers: mostly blood for DUI offenders, mostly urine by DUID offenders
4. Physical examination: mostly physical health status  
Performance testing: perceptual functioning, reactive functioning, cognitive functioning (mostly for DUI, seldom for DUID)
5. Personality testing: seldom applied for DUI, not for DUID



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## WP5.1 - Provider questionnaire survey



### Form C results: Prior driver assessment/screening

#### Persons conducting prior assessment/screenings at provider:

- Psychologists with different qualifications, mostly traffic psychologists are conducting the psychological assessment;
- Mostly specialists in traffic medicine are carrying out the medical assessment, but also general practitioners and psychiatrists.



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## WP5.1 - Provider questionnaire survey



Thank you for your attention!



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### 2.3.3 Analyses of Change Process and Components in Driver Rehabilitation Courses

In the following the power point presentation file is documented.



**Work Package 5 "Rehabilitation"**  
**Task 5.2 "Good Practice"**

# Participant Feedback-Study

**International Symposium on  
Driver Rehabilitation**

16<sup>th</sup> May 2008 in Thessaloniki, Greece

Simone Klipp



**DRUID**



Federal Highway Research Institute

## Participant Feedback-Study



### Aims

- To gather information on major aspects of successful vs. non successful course participation
- To analyse the individuals' change processes within these measures
- To indentify the relevant variables which initiate and support the change process



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## Participant Feedback-Study



### Theoretical framework

#### *The Transtheoretical Model of Change (TTM)*

<b>Maintenance</b> Work to prevent relapse, increasing confidence of continuing change
<b>Action</b> Specific overt modification in life-style, observable steps of action
<b>Preparation</b> Intention to take action in immediate future, first initiatives
<b>Contemplation</b> Awareness of Pros & Cons of changing => Ambivalence, Intention
<b>Precontemplation</b> No problem awareness => no intention to change

Which stage did the client reach?



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## Participant Feedback-Study



### Theoretical framework

#### *The Transtheoretical Model of Change (TTM)*

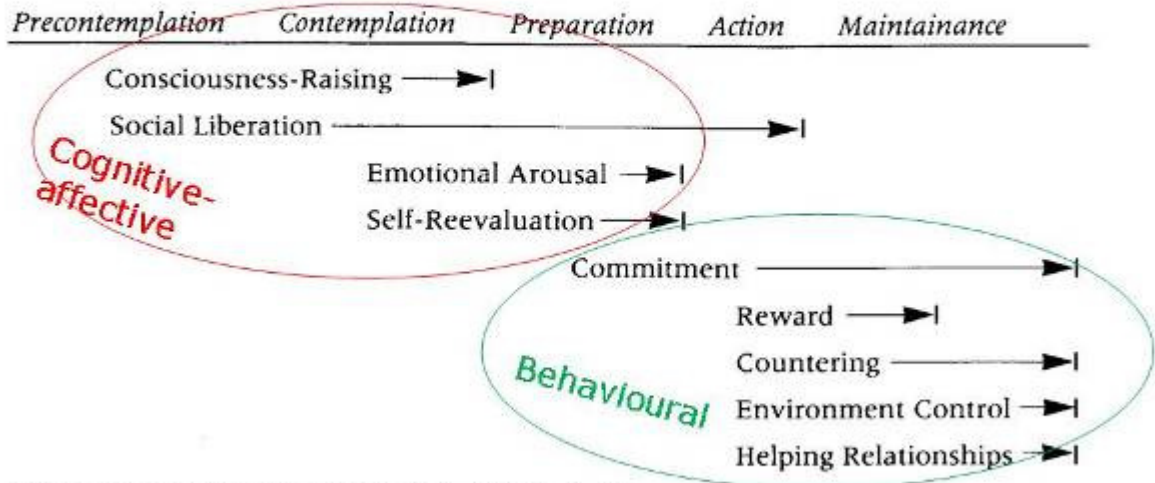


Figure adopted from Prochaska et al., 1994a, S. 67



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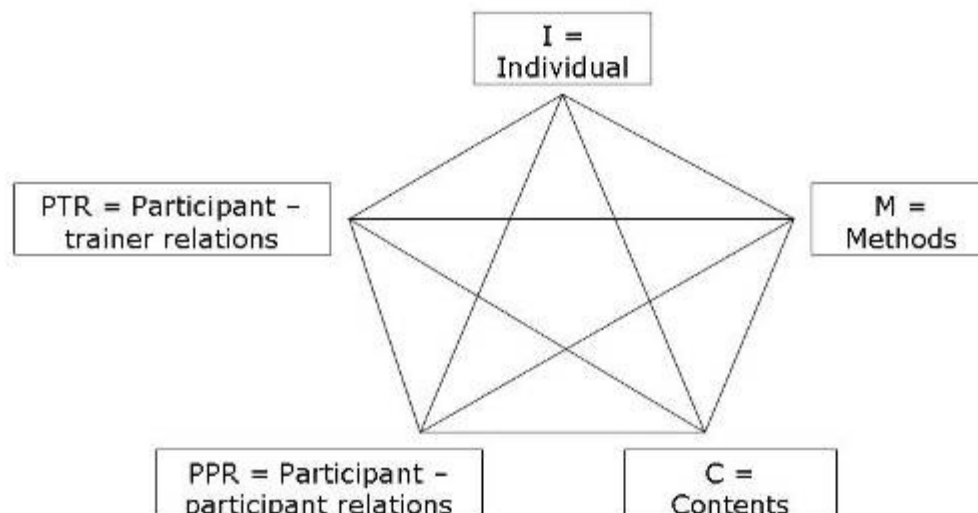


## Participant Feedback-Study



### Theoretical framework

#### *The Diamond of Change – the "contributing factors"*



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## Participant Feedback-Study



### Methods

- Construction of items integrating both concepts
- Translation of final questionnaire versions in 6 languages after test runs
- Creation of a simultaneous “drug-version” for Germany
- Standardized instructions



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## Participant Feedback-Study



### Results – Socio-demographics

*DUI sample (N=7339)*

Age (n=6727)		34,1 ±12,6	16,0-80,0
Gender (n=7144)	male	6356	86.6%
	female	788	10.7%
Partnership (n=6335)	no	3036	41.4%
	yes	3299	45.0%
Residence (n=6741)	< 100.000	4274	58.2%
	100.000-500.000	1368	18.6%
	> 500.000	1099	15.0%
Education (n=6013)	No compulsory school	140	1.9%
	Compulsory school	1312	17.9%
	Secondary school	2612	35.6%
	A-level	804	11.0%
	Vocational school	395	5.4%
	College	263	3.6%
	Academic	487	6.6%



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## Participant Feedback-Study



### Results – Traffic-related variables

*DUI sample (N=7339)*

BAC/BrAC (n=6864)	1.35	±0,61	0.00-5.00
Accident (n=7123)	no	5372	73.2%
	yes	1751	23.9%
Prior DUI convictions (n=7134)	no	5428	74.0%
	yes	1706	23.2%
Prior participation in DR (n=6684)	no	5828	79.4%
	yes	856	11.7%



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## Participant Feedback-Study



### Results – Country level

#### *Socio-demographics & offence-related variables*

	N	Age	Gender (%)		BAC (‰)	Accident (%)
			male	female		
<b>Austria</b>	1646	36.1	86.3	11.3*	1.47	23.1
<b>Belgium</b>	103	37.6	90.3	9.7*	1.55	35.0
<b>France</b>	686	37.5	87.6	11.2*	1.36	10.1
<b>Germany</b>	2351	29.8	86.4	10.0*	1.38	29.2
<b>Great Britain</b>	1022	34.7	79.9	17.5*	1.36	20.6
<b>Hungary</b>	657	37.7	94.7	3.2*	1.76	34.7
<b>Italy</b>	140	29.8	92.9	7.1	1.30	15.7
<b>Netherlands</b>	501	36.3	82.8	13.2*	1.29	14.0
<b>Poland</b>	233	37,2	97.4	1.7*	1.41	20.6
<b>Total</b>	7339	34.1	86.6	10.7*	1.43	23.9
<b>Drugs (only D)</b>	550	24.0	90.5	6.0*		6,7



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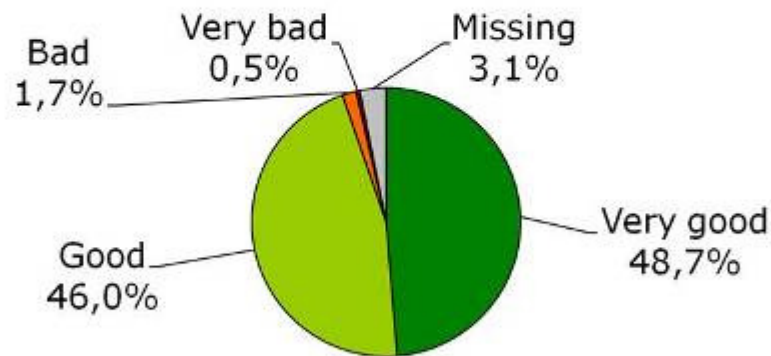


## Participant Feedback-Study



### Results - Overall evaluation

*DUI sample; rating frequencies (N=7339)*



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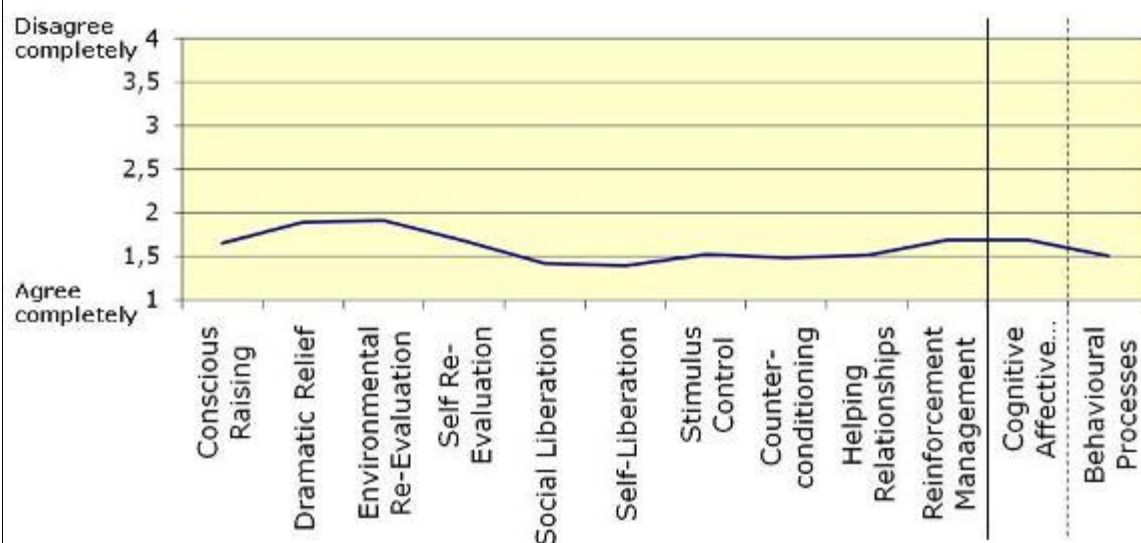


## Participant Feedback-Study



### Results - All TTM Processes

*DUI sample; overall means (N=7339)*



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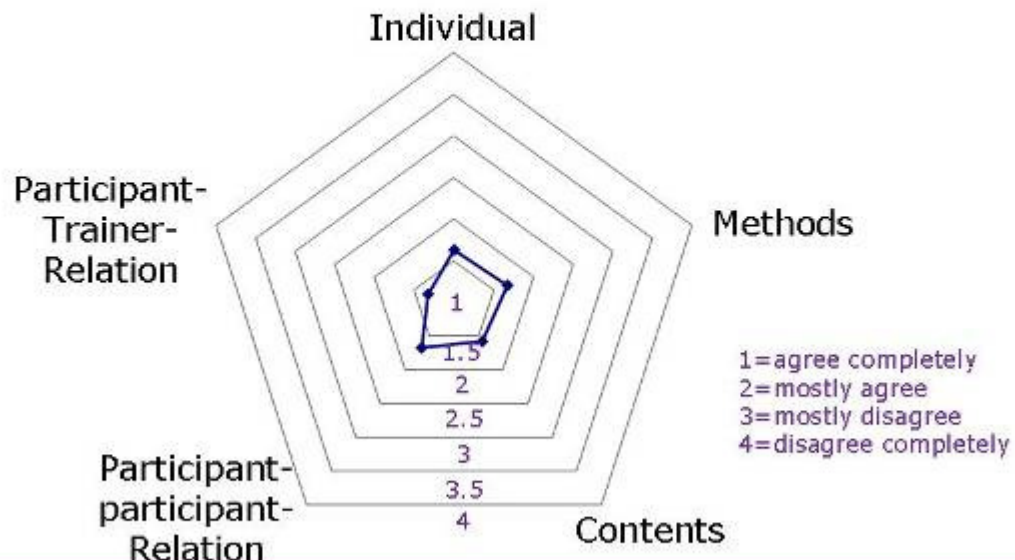


## Participant Feedback-Study



### Results – Diamond of Change

*DUI sample; overall means (N=7339)*



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## Participant Feedback-Study



### Results – Socio-demographics

*DUID sample (N=550; only Germany)*

Age (n=505)		24,0 ±5,0	18,0-55,0
Gender (n=522)	male	489	90.5%
	female	33	6.0%
Partnership (n=451)	no	295	53.6%
	yes	156	28.4%
Residence (n=515)	< 100.000	340	61.8%
	100.000-500.000	94	17.1%
	> 500.000	81	14.7%
Education (n=475)	No compulsory school	7	1.3%
	Compulsory school	252	45.8%
	Secondary school	127	23.1%
	A-level	41	7.5%
	Vocational school	16	2.1%
	College	0	0%
	Academic	32	5.8%



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## Participant Feedback-Study



### Results – Traffic-related variables

*DUID sample (N=550; only Germany)*

Detected drugs	n	f
Cannabis	441	80,2%
Amphetamine	107	19,5%
Ecstasy	54	9,8%
Cocaine	50	9,1%
Heroin	12	2,2%
LSD	12	2,2%
<b>Accident</b>	<b>37</b>	<b>6.7%</b>
<b>Prior DUI/DUID convictions</b>	<b>81</b>	<b>14.7%</b>
<b>Prior participation in DR</b>	<b>91</b>	<b>16.5%</b>



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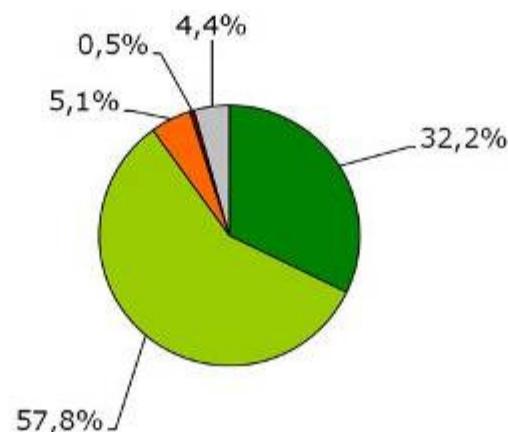
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## Participant Feedback-Study



### Results - Overall evaluation

*DUID sample; rating frequencies (N=550)*



■ very good
 ■ good
 ■ bad
 ■ very bad
 ■ missing



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## Participant Feedback-Study



### Results – All TTM Processes

*DUID sample; summary (N=550)*

- Items on the behavioural processes gain higher agreement as items on the cognitive affective processes
- Highest agreement on the scales for social liberation & social support
- Least agreement on the scales for dramatic relief



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## Participant Feedback-Study



### Results – Diamond of Change

*DUID sample; summary (N=550)*

- Agreement scores in this sample are slightly lower than in the DUI sample
- Participant-trainer relationship is evaluated to be the most important contributing factor
- Methods are evaluated as least important



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## Participant Feedback-Study



### Conclusions

- DR interventions are highly accepted and positively evaluated by both target groups
- Concept of DR courses seems to be adequate for the majority of offenders
- No longterm conclusions regarding recidivism can be drawn
- Further analysis in order to identify the needs of those who do not profit sufficiently



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**Thank you for your  
attention!**

Simone Klipp

Federal Highway Research Institute



## 2.3.4 In-depth Analysis on Reasons for Recidivism

In the following the power point presentation file is documented.





## In-depth analysis on reasons for recidivism

### Contents

- Introduction
- Legal situation of driver rehabilitation (DR) and driver assessment (DA) in Austria
- Choice of sample and restrictions
- Study design and conduction
- Composition of study and control group
- Results



## Introduction

### Specification of the subtask of Task 5.2 of DRUID WP 5 “in-depth analysis of driver rehabilitation measures”:

- *In depth analysis on reasons for recidivism of driver under influence of psychoactive substances who participated in RH-programmes. The empirical analysis will combine information from different tools, above all data on traffic relevant personality and attitude, traffic relevant performance data, socio-demographical and driving related data, data from driver assessment and fitness-to-drive decision, variables from RH-course attendance (number of participants, gender, age) and physiological markers. (p. 101)*

#### The DRUID recidivism study

- investigates possible contributing factors of repeated drink-driving offences
- does not focus on the principal effectiveness of DR-courses
- and also does not evaluate driver assessment





## Legal situation of driver assessment (DA) in Austria

Since 1997 drivers with BAC of 1.6 ‰ and above have to undergo a traffic psychological driver assessment (DA).

The requirements for DA are defined in the Austrian Driving Licence Code and the Driving Licence Health Act.

DA aims at verifying

- the subject's capabilities with respect to driving a motor vehicle safely (traffic specific performance) &
- to his/her willingness to adapt to traffic regulations.

The DA results are documented in an expertise.



## Legal situation of driver rehabilitation (DR) in Austria

Since 2001 all drivers with BAC of 1.2 ‰ and above have to undergo a driver rehabilitation (DR)-programme

Drivers with a new drink-driving offence within five years with 0,8 ‰ and above have to undergo another DR-course (with one session more)

\*\*\*

Only organisations approved by BMVIT are allowed to carry out DA and DR – both services can be provided by the same institution





## Choice of sample and restrictions

### Sample

DUI - all with a DA - with BAC of 1.6 ‰ or higher plus **two** DR-courses → study group "Recidivists"

DUI - all with a DA - with BAC of 1.6 ‰ or higher plus **one** DR-course → control group "Controls"

### Restrictions

- Data for the study derive from one Austrian provider only, namely the Austrian Road Safety Board (KFV)
- The analysed DUIs are high-risk offenders but not the entire DUI-group



## Composition of control group

### Matching criteria for control group:

- DUI with BAC of 1.6 ‰ or higher, this means DA and **one** DR-course **only**
- Federal state of assessment
- Gender
- Age
- Education
- Migration background
- Diagnostician





## Study design and methodology

### Design of study and methodology

The in-depth analysis of recidivism was carried out by means of a case-control study design:

- Analyses of DA-data of "Recidivists" and "Controls" by means of univariate group comparisons
- Prediction of recidivism by means of regression analyses
- It was a retrospective analysis of existing data

### Variables

- In total app. 90 variables taken from the DA-expertise

### Time frame

- January 2002 - September 2007



## Groups of variables

- Socio-demographic variables
- Driving-related variables
- Alcohol offences related variables
- Alcohol consumption related variables
- Nicotine and illegal drugs related variables
- Traffic-specific performance test variables
- Traffic-specific personality variables







## Results - Main characteristics of sample

**Total sample: n=303; total data base: app. n=7000**

- **Gender:** 95,7% (n=290) are male and 4,13% are female (n=13)
- **Age:** 38,4, min. 19, max. 66 years
- **Province:** Burgenland: 3,6%, Carinthia: 9,2%, Lower Austria: 16,7%, Upper Austria: 15,4%, Salzburg: 4,9%, Styria: 20,9%, Tyrol: 18,6%, Vorarlberg: 2,6%, Vienna: 8,3%
- **Education:** no: 1%, compulsory: 11,2%, apprenticeship: 71,9%, A-level: 8,9%, academic: 2,3%, missing: 4,6%

**Control group was optimally matched**



## Summary of Results - Recidivism risk profile

- Having high BAC levels at the offence or refusing the breath test
- Having additional prior drink-driving or already several DUI offences, consequently having longer suspension periods of driving license
- Having an habitual drinking pattern in the past and in spite of past or current abstinence periods having an increased alcohol tolerance, thus having also felt less impaired at the actual DUI offence
- Denying or not having any alcohol related health problems, being a smoker and being less aware of own health issues
- Showing a more unrealistic self-perception and less self-reflection whereby alcohol related risks in traffic are underestimated
- Not living in a partnership
- Being assessed as having an enhanced re-offence risk by a qualified expert (traffic psychologist).





## Conclusion – Non-successful course participation

Recidivists strongly tend to ignore or underestimate their problematic alcohol consumption pattern and their enhanced probability of re-offences in traffic, especially as

- they support large quantities of alcohol without feeling impaired,
- do not show any significant decreases in traffic related performance aspects and
- do not experience alcohol related health problems.

This all together strengthens the recidivists' conviction that they can control their alcohol consumption and above all that they can separate drinking and driving reliably.



*Thank you very much  
for your attention !*



## 2.3.5 Quality Assurance for Driver Rehabilitation Measures

In the following the power point presentation file is documented.



The image shows a PowerPoint slide with a white background and a thin purple border. In the top right corner, there is a logo consisting of five colored squares (orange, red, blue, yellow, green) followed by the text 'bast' in green. The main title is 'Quality Assurance for Driver Rehabilitation measures' in large, bold, black font. Below the title, on the left, is the text 'International Symposium on Rehabilitation Programmes for Drivers under the Influence of Alcohol and Drugs' in bold black font, followed by 'Thessaloniki, Greece 16th May 2008' and 'Michael Escrihuela-Branz'. On the right side, there is a logo for 'DRUID' featuring a stylized pink elephant made of dots. At the bottom left, there are the European Union flag and a blue logo with a white '6'. At the bottom right, the text 'Federal Highway Research Institute' is displayed.

## Quality Assurance in DR



### Overview

- Definition & evolution of QM
- QM in driver RH measures in Europe
- Overview of German QM-System
- Outlook



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## Quality Assurance in DR



### Definition of QM

- all organized methods that aim at continuous improving products, processes and services of all kind
- in order to create trust to the customers and get the company fit for competition in the market
- Components:
  1. *Quality control*
  2. *Quality assurance*
  3. *Quality improvement*



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## Quality Assurance in DR



### History of ISO 9000 series

- Pre ISO 9000

developed in GB during WWII in ammunition production to assure safer assembling (BS 5750 standard) due to grave safety problems, such as bomb explosions!

1987 adopted as ISO 9000 at the instigation of British Government



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## Quality Assurance in DR



- **ISO 9000:1994**

additional preventative actions, requiring compliance with documented procedures

- **ISO 9001:2000**

radical change in thinking to process management, instead of inspecting only the final product

- **ISO 9001:2008**

to be established in the future, no substantially changes, with an extended period of transition



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## Quality Assurance in DR



### Norms of QM in driver rehabilitation

- 46 providers from 12 countries were consulted
- 10 countries reported elements of QM at different levels
- 3 countries with international norms of QM
- No norms of QM reported from Poland and Portugal



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## Quality Assurance in DR



### QM in driver rehabilitation

Country	N	ISO	DIN	EN	other	internal	single
Austria	9				2	7	3
Belgium	2				1	1	
France	7					7	1
Germany	7	5	7	5	1		
Hungary	1					1	
Italy	1						1
Netherlands	1					1	
Sweden	1	1					
Switzerland	1					1	
U. K.	14	3			4	7	1
<b>In total</b>	<b>44</b>	<b>9</b>	<b>7</b>	<b>5</b>	<b>8</b>	<b>25</b>	<b>6</b>



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## Quality Assurance in DR



### Provider recommendations

- Better/clear/standardized quality assurance-system for all providers
- Establishment of an independent national institution/body/entity for all DR issues
- Inclusion of an effective QM-System
- Separation (personnel and institutional) of assessment and rehabilitation
- Evaluation and orientation at theories of Behaviour Modification



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## Quality Assurance in DR



### QM-System in Germany

- legal frame: „German Driver Licensing Regulations“ (FeV) renewed and in force since 1th January 1999
- independent „Accreditation Agency for Bodies Providing Driving Licence Services“ set up at the Federal Highway Research Institut (BAST) since 1th June 1998
- regulates – inter alia - the accreditation and all derived QM/QA issues for agencies conducting (all type of § 70 FeV) courses aimed at restoring driver aptitude



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## Quality Assurance in DR



- currently there are 10 accredited providers, with a total of 11 different nationwide programmes operating (DUI / DUID and other offenders)
- **Central element: Continual Improvement**
  - Auditing in situ (20% of providers per year)
  - Development on the basis of new technological and scientific findings
  - Integration of the administrative needs and experiences
  - Support of the interests of the involved drivers



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## Quality Assurance in DR



### Quantity structure

- 20 bodies with 150 assessment agencies all over the country, conducting almost 106.000 assessments (2006), with a annual turnover of € 50 millions<sup>1</sup>
- 4.000 driver improvement courses, with over 40.000 participants conducted by 500 especially trained and supervised traffic psychologists, turnover € 20 millions<sup>1</sup>
- QM-System for driving licence services in Germany about € 500.000 of costs per year<sup>1</sup>

<sup>1</sup>[source Kroj, 2001]



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## Quality Assurance in DR



### Outlook – next steps

- Interviewing country experts regarding their QM elements
- Combining results from literature and practice
- Defining basic QM and QA criteria for general European guidelines
- Encourage all countries in developing and establishing their appropriate QM and QA in DR for a high-grade and uniform standard in Europe



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**bast**



**Thank you for your  
attention!**



Michael Escrihuela-Branz  
Federal Highway Research Institute

### 2.3.6 Greek Classification of Drugs affecting Driving Performance

In the following the power point presentation file is documented.






## Greek legislation for drug use prevention

- In Greece, since 1987, a law for the drug spreading prevention (1729/1987/A 144 19870807) has been launched, after a common agreement between the Hellenic Ministry of Health and the Hellenic Ministry of Justice.
- According to this law, **a drug is identified as any natural or artificial substance that affects the human central nervous system causing physical addiction to the user of this substance.**
- Moreover, drugs are sub-divided into 4 categories, according to the organization responsible for their distribution.




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DRUID Rehabilitation Symposium




## Category 1: Drugs for which the Hellenic Government is responsible

## Category 2: Drugs for which the Governmental Drug Monopoly is responsible



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**Category 1:**

Cannabis et resine de cannabis
Cetobemidone
Desomorphine
DET
DMHP
DMT
Heroine
Mescaline
Parahexyle
PCE
PHP or PCPY
Psilocine
Psilocybine
STP, DOM
TCP
Tetrahydrocannabinol
(+) -Lysergide, LSD, LSD-25
2C-D
2C-E


**Category 2:**

Cocaine
Codeine
Dextromoramide
Ethylmorphine
Nalbuphine
Opium
Pethidine




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**Category 3:**  
Drugs for which legal or physical persons of the Governmental Drug Monopoly are responsible




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Acerphine	Clonitazene	Etorphine, M99	Moramide intermediaire	Phenacetamide
Acetyldihydrocodeine	Coca (feuilles de coca)	Etoperidine	Morpheridine	Phenazocine
Acetylmethadol	Cudoxine	Furethidine	Myrophine	Phencyclidine
Alfentanyl	Concerta	Hydrocodone	Nalbuphine	Phenmetrazine
Allylproline	Desampfetamine	Hydromorphinol	Nicodicodine	Phenomorphone
Alphaceptylmethadol	Dexmedetomidine	Hydromorphone	Nicomorphine	Phenoperidine
Alphamerpodine	Dexmomidol	Hydroxypethidine	Nococodine	Phentanyl
Alphamethadol	Dexpropoxyphene	Isomethadone	Nu acymethadol	Pholcodine
Alphaprodine	Diampromide	Levomethorhane	Nu codeine	Pimlidine
Amineprine	Disthythiambutene	Levomoramide	Norlevorphanol	Piritramide ou piritramide
Amphetamine	Dihydrocodeine	Levophenacymorphane	Normethadone	Proheptazine
Anileridine	Dihydromorphine	Levorphanol	Normorphine	Propidine
Benzethidine	Dimenoxadol	Mecloqualone	Norpiparone	Propiane
Benzylmorphine	Dimishepamol	Metazocine	N Oxymorphine	Racemethorphan
Beta acetylmethadol	Dimethylthiambutene	Methadone intermediaire	Oxycodone	Racemoramide
Betamerpodine	Diphanoxylate	Methamphetamine	Oxycotin	Racemorphan
Detamethadol	Diphenoxine	Methaqualon	Oxymorphine	Sulfentanyl
Betaprodine	Dipipanone	Methyldesopphine	Pentazocine	Thebaine
Beziramide	Dratbanol	Methyldihydromorphane	Pethidine intermediaire A	Thebaine
Bromomethydate de morphine	Eggonine	Methyphenidate	Pethidine intermediaire B	Tilidine
Butophanol	Ethylmethylythiambutene	Methyphenidate/ Rublo	Pethidine intermediaire C	Trimeperidine
Butyrate de dioxaphetyl	Etunitazene	Metopon	Phenadoxone	




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Category 4:  
Drugs which are available in pharmacies with the license of the Hellenic Organization of Medicines



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Alprazolam	Estazolam	Nimetazepam
Amobarbital	Ethchlorvynol	Nitrazepam
Amphetamine	Ethinamate	Nordazepam
Barbital	Ethyl loflazepate	Oxazepam
Benzphetamine	Fludiazepam	Oxazolam
Bromazepam	Flunitrazepam	Pentobarbital
Buprenorphine	Flurazepam	Phendimetrazine
Camazepam	Glutethimide	Phenobarbital
Chlorazepate	Halazepam	Phentermine
Chlorodiazepoxide	Haloxazolam	Pinazepam
Clobazam	Ketazolam	Pirpadrol
Clonazepam	Lopazepam	Prazepam
Clotiazepam	Loprazolam	Secobarbital
Cloazolam	Lormetazepam	SPA
Cyclobarbitol	Mazindol	Temazepam
Delorazepam	Medazepam	Tetmazepam
Dextromethorphan	Meprobamate	Triazolam
Diazepam	Methylphenobarbital	Zolpidem/Biochemie
Dormikal	Methpyrylon	Zolpidem/Genthan
		Zolpidem/Saneloz

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## Correspondence to the listed medicinal drugs in DRUID WP4

- The classification of drugs in Greece is not based on their influence on driving performance, but on the organization responsible for their distribution.
- All drugs included in the 4 categories are illegal to be used while driving, thus, an attempt was made to find the correspondence between the drugs that are listed into the four categories, to the medicinal drugs that are listed within DRUID, collecting categorization from other EU countries.

	B	C	D	Total
Listed drugs according to Greek legislation	7	109	58	174
Listed medicinal drugs within DRUID WP4	6	17	42	65
Drugs not included within DRUID list	1	92	16	109

- It was found that 65 out of 174 drugs, that are listed in DRUID, are also included in the Greek classification.

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### 2.3.7 Existing Treatment and Rehabilitation Structures in Greece

Mr. A. Laliotis is drug rehabilitation consultant in Greece. The following summary of his presentation was prepared by Lila Gaitanidou (CERTH, HIT).

#### **Presentation abstract**

Rehabilitation centres in Greece mostly focus on later stages of drug addiction. National surveys on drug-taking and driving report an extremely high percentage of accident prevalence (1 accident / 70% drug and driving conditions). Unfortunately, deadly accidents do occur when drugs and driving are combined. Empirical research has shown that among different types of drugs, cannabis is the least affective compared to heroine, psychoactive drugs and alcohol consumption when it comes to sleepiness while driving. Even professional drivers have been reported to drive under the influence of drugs. The first rehabilitation centres were established in Greece during the 80's. The situation remains stable over the last 20 years, as governmental centres monopolise the process of treatment and rehabilitation. In addition to what was mentioned earlier, the efficiency levels of such programmes have dropped around 30%. Legislation barriers exist for private centres. Moreover, training hindrances are impeded in such an endeavour. The functionality and efficiency of the existing programmes are literally under the microscope and advancement is mandatory. Imprisonment of a drug-driving offender is where governmental support ends and the real problems kick in. The waiting lists for rehabilitation centres are long. Furthermore, the most popular programmes are the so-called methadone treatment programmes developed mostly as a substitute rather than rehabilitation and treatment. Substance control and educational programmes may be the profound answer to such a deeply rooted scourge. Privately oriented institutes have developed techniques and programmes applied by professionals trained in the latest rehabilitation techniques. However, legislation constraints and lack of support by politicians do not allow these programmes to flourish.

## 2.3.8 Towards Establishing Rehabilitation Programmes – Case Study: Greece

In the following the power point presentation file is documented.








## Currently in Greece...

- There is no rehabilitation measures established regarding drivers arrested under influence.
- Existing rehabilitation framework for alcohol and drug users not driving-related.
- Both national and private initiatives.




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## The need...

- Many violations in terms of driving under influence (alcohol).
- For drugs, control is mainly performed in case of accident.
- Significant number of accidents occur due to alcohol or drug abuse.
- Fining is only a temporal remedy; more fundamental action is needed.



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## What is new...

- In 2007 the Greek Traffic Law was updated:
  - The alcohol limit was lowered (0.5g/l in blood, 0.25g/l in breath).
  - The fines for violators are now stricter (reaching even prison sentence in case of high alcohol percentage in blood – more than 1.1g/l).
  - No specific limits for toxic substances are yet set, but the law is open to such specification, as clearly stated.
  - If the driver is arrested to drive under influence of substances that affect the driving performance, the sentence is 2 months prison, plus 200Euros fine, plus 3-6 months driving licence suspension.
- Nothing on rehabilitation!



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## What is new...

- During the past decade the controls of police have been intensified.


**Checked persons**

Year	Number of checks
1980	200,000
1986	250,000
2000	350,000
2001	600,000
2002	1,000,000
2003	1,250,000
2004	1,250,000
2005	1,300,000
2007	1,500,000

**Percentage of positive alcohol breath tests**

Year	Percentage (%)
1998	7.00
2000	8.00
2001	7.00
2002	5.00
2003	4.00
2004	3.50
2006	3.50
2007	3.00

- Awareness campaigns on the effects and the danger of driving under influence have been undertaken by both national and private bodies.



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## The future...

- Rehabilitation programs are absolutely needed to be included in the legal framework.
- Different levels according to performed violation:
  - Short – time consulting.
  - Entering an organized driving rehabilitation program.
  - Entering a drug/alcohol rehabilitation program.
  - Psychological support.
  - Re-assessment for ability to drive.
  - Etc....
- Relevant education and awareness features should be included also in the driver education curricula.



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## The future...



- Initiatives on governmental level are needed.
- Private initiatives also valuable but the relevant legal framework for their function is needed.
- EC Directives and/or Recommendations would enhance and speed up the procedures.



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## DRUID



- The results of DRUID WP5, where existing experience of other EU countries are gathered and assessed, are valuable in terms of identifying the structures that could be adopted in the Greek reality.
- Most important issue is the stimulation of politicians and decision-makers, in order to create the necessary background for such programs to be established.



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## **2.4 Discussions after each presentation**

### **Literature review**

No discussion

### **Provider survey**

No discussion

### **Participant feedback study**

#### **Low female DUI/DUID offender percentages in Hungary and Poland**

The very low number of female offenders surprised a participant.

A WP5 team member asked the Hungarian and Polish providers if this meant that women drank less.

The Hungarian provider answered that females drank, but they drove less often while being drunk.

The Polish participant stated that women in Poland were less often sent to prison than men and that this might explain the very low female percentages in the Polish sample.

### **In-depth analysis on recidivism reasons**

#### **Influence of accident involvement on change motivation**

A Greek participant asked if it was possible that those DUI/DUID offenders who had also been involved in accidents, were more concerned or motivated in the DR.

A WP5 team member indicated that some of the re-offenders and first time offenders had accidents but that no significant differences were found in accident variables between the two groups. Therefore, the hypothesis that heavier consequences might contribute to a higher change motivation does not count.

#### **Victim confrontation in DR**

A Greek participant suggested that sharing experiences with persons who had had an accident with personal consequences (i.e. confrontation with individual consequences) could be useful or motivating for offenders, at least for those who think DUI/DUID was not a serious problem or who were only concerned about the fines - as enforcement in many countries is very low.

A WP5 team member gave an explanation on the methods in the Austrian DR group courses:

DR should be seen as a group process in a group setting. The trainer is not teaching; it is the participants' exchange which is most important in the group. A group relation is built up and experiences are shared. Nothing influences clients more than having other clients in the group and talking about their feelings and experiences. The group processes are clearly the most important. So, just bringing someone else (an outsider) in the group (e.g. a victim) would only be shocking. Offenders would think that this would not happen to them, because it is too far away from their reality. If another course participant tells this, it does have an impact. Therefore, again, exchange within the group is the most important variable, as much more direct correction among group members is provided. All groups are very different (which is very challenging for the trainers), so the trainer must keep track of the flow of information within the group, must keep this process going on and lead it always in the direction of change, and this requires some kind of therapeutic approach, it is not just teaching.

Another WP5 team member agreed with this and added that the effectiveness of victim impact panels (when offenders are obliged to meet in a group setting a real victim, who lost a family member, caused a death etc.) has been measured in the USA and they seem not to be so effective in the reduction of recidivist numbers. However, the effects were bigger for females than males, although there were

rather low effect sizes in general. Her personal experience as a DR trainer also underlines these results. In the WP5 recidivism study the accident variable was not evaluated into small or severe accidents, thus, different effects could not be analysed.

Another WP5 team member added that the sample of the recidivism study only had included very few participants who had gone to court. She explained the assignment system in Austria:

A DUI offence in Austria always leads to an administrative procedure. In case of an accident with personal damage, there is an additional court trial, followed by the administrative procedure. Thus, DUI offenders involved in an accident with personal damage should have been in the study sample, but only very few of them, as they mostly regain automatically their driving license as they were already punished (prison).

Another WP5 team member pointed out that the DR procedure in Austria focused more on the lifestyle of the driver, which had led to the offence, and less on the direct consequences in traffic (e.g. accident, injury or no accident, just police control). Therefore, the main questions in DR were “why did the offence happen to me”, “what does this mean for my life”, “what has to be changed so that this does not happen again”. DR worked better when the topic addressed the individual situation: “What does it have to do with me...?”. DR aims at opening up an offender and at raising his/her awareness. All information flow is confidential, nothing goes to the authorities (authorities only get a certificate that the DR was followed); so it is just up to the offender how much he/she gains from it. Therefore the importance to have psychologists with group dynamic skills as trainers is stressed, in order to enhance the change process, to make the client think “what did I do wrong”, to cut the bad learning process of (e.g. ‘everybody drinks and drives’ etc.), and to increase the social responsibility and individual competence regarding drinking and driving. Looking at the results of the analysis of change process and components in driver rehabilitation courses it can be stated that most participants gave a positive to very positive ratings of the DR which indicates a positive process in the participant (they gained insight) regardless whether they participated obligatory or voluntary.

A Greek participant stressed that the social stigma of injuring someone in Greece is huge. He hypothesised that a module of bringing a victim into the class could provide good input.

A WP5 team member indicated again that it was contra-productive to bring in people from outside into the group and that the group members would not make the connection to their own behaviour. According to the experiences as a course leader, the best thing was that someone in the group started to talk about such experiences. That would also be a good basis to continue: how did he/she experience this, did anyone else in the group have such experiences, what do other group members think and feel when they hear this, etc. Working with the group dynamics and using the group members’ own stories is the way to involve the offenders personally, especially as a lot of tasks (like self-reflection tasks, modification of problematic alcohol pattern, etc.) have to be done in a very short time (e.g. four sessions in Austria).

### **Required duration of DR**

A Greek participant indicated that maybe more than 4 sessions (Austrian system) were required in DR. A WP5 team member indicated that responsible authorities and politicians most probably would not support many sessions and that they were not willing to make such measures more time and money consuming as they already were, since this would hardly be supported by the public.

Another WP5 team member mentioned that the Austrian DR courses were a group intervention, involving a dense learning process, which allows doing the DR in a frame of about one month. But other experiences exist, e.g. in Germany, with long term DR for addiction. Normally for first time offenders, DR can be realized and be effective in about one month duration. Offenders are normally not ill persons, most of them are integrated in the society, but there is an area where improvement is

needed. Therefore, for the main group of offenders this short duration is enough, but some offenders may need longer.

Another WP5 team member agreed with this: only for a minor part of offenders, this was not enough, so it is important to identify the characteristics of the higher risk driver group in order to provide special, longer DR interventions to them. This is considered in WP5.

### **Recidivism after DR**

A Greek participant asked if there was a way to assess what one had learned from the DR, and what happened if there was again an accident after having followed the DR.

A WP5 team member indicated that people needed a certain state of mind to change. Maybe the first course was not enough. Thus, in Austria re-offenders had to follow another DR course (with one more session).

Another WP5 member added that an accident is a coincidence which is not controlled by the driver. What DR wants to make offenders understand is that 'when one drives under the influence on the road, one can have an accident'. DR courses thus always focus on the individual situation. With 10 participants, it is necessary to stick to and work further from the most important motivations of the participants; the individual arguments and motivation points have to be identified during the course.

Another WP5 team member referred to the literature review, which showed the necessity to assess the individual offenders' needs and to offer different levels of DR. At least a differentiation with regard to substance dependency should be made.

A French participant furthermore said that a course was never the same, even within the same course method, because there are always different groups.

### **Quality management (QM)**

No discussion.

### **European standard group interventions**

This presentation was not foreseen in the programme but was requested by several Greek participants. A WP5 team member gave a presentation on the process of standard group DR interventions, their frame conditions and common features.

### **Use of BAC level calculations in standard group courses**

A Greek participant asked whether BAC level calculations were generally applied in the courses.

A WP5 team member clarified that sheets of the amounts of alcohol in different beverages were used: the drinking amount, drinking time and body weight which influence the BAC levels were shown in a table. Plus, it was also very important to give the message that the BAC is a dynamic value, which is not so easily calculated and also easily changes. But these calculations were not so important in DR courses as the participants did not use it very often themselves. Also in the WP5 provider survey it came out that BAC calculations were not carried out very regularly.

Another WP5 team member added that in Germany people were given a raw BAC estimation formula. She remarked though that with regard to DUI it was especially important to clarify that going from an intention to an actual behaviour was a big step; it should be explained that intentions are not so closely linked to actual behaviour and that it was even more difficult to stick to intentions while being drunk or when having drunk. The DR should thus not only deal with strategies like using a taxi when having drunk. It is very important to reflect on the drinking occasions, the effects of that, and thus not only on the drinking and driving behaviour. A high focus should lie on the general drinking behaviour, in order to change a lifestyle, and not just on the drink driving behaviour. This requires some kind of therapeutic, beyond an educational, approach.

### **Change of lifestyle as major DR aim**

A Greek participant stated that persons who drove under the influence often drank as a way of life and driving was part of a daily routine. He asked whether these courses could convince them not to drive when drinking: “How can you motivate a driver to change his/her lifestyle and not to drink in general, and is this the aim of DR?”.

A WP5 team member explained that most DUI offenders were not dependent or addicts but that a lot did show alcohol misbehaviour or misuse. DR in those cases aimed at trying to bring the client in this direction that for his situation it was better not to drink alcohol at all, it aimed at having this confirmed by the clients themselves. They were motivated and asked during the DR process to test it and then were asked for their experiences, and often they indicated to feel better when not drinking. When a trainer felt that a course participant needed more assistance, he/she was informed about possible treatment institutions. Thus, offenders were supported to reduce the fear of social stigmatisation which was very frequent in the group of alcohol misusers and which hindered them to take the necessary treatment actions.

Another WP5 team member added that the DR courses in Austria were obligatory: one did not get the driving license back if not all DR course sessions had been attended.

### **Statistics on individual treatment seeking after DR**

A Greek participant asked whether there was any statistical proof that there was motivation of these people to go on to ‘heal’ themselves and that they really were still motivated to do something on their ‘problem’ after having followed all DR course sessions and to go on their own initiative to therapy?

A WP5 team member said that Austrian providers were not allowed to follow the individual history, so they had no statistics on that, but through personal contact with a psychotherapist of the biggest addiction clinic in Austria it became clear that since the start of the DR courses people were coming earlier to treatment. What can be reached is to reduce the barrier so that the driver maybe gets earlier treatment: DR as a first eye opener.

Another team member added that DR courses could at least have an effect in the awareness rising of a problem. In Germany, with a 20-year-old DR system, offenders first had to pass a medical-psychological assessment (MPA), and only persons considered capable to process such a DR course were assigned to the courses. The MPA results could also indicate that addiction treatment or individual traffic psychotherapy was required instead of a group course. In Austria, referring to DR was related much closer to the offence (directly related to the BAC). In Germany, only a highly selected part of the offenders was assessed to be ‘proper’ for the course, but even then there were still a few who seemed not to profit from it during the course operation (the heavy cases). Then the aim could be to make those ones aware that there was a bigger problem and to guide them in the reflection and motivation process that more intense treatment might be necessary.

Another WP5 team member furthermore mentioned that offenders in the Hungarian system underwent assessments and were then assigned to one of the seven levels of DR approaches, varying from low risk for recidivism up to the highest risk.

### **Intoxicated DR participants**

A Greek participant reflected on the presentation of the standard group courses and the method of the psychological-educational approach. She had the feeling that it was not directed to an individual who was under the influence of alcohol. In her 20-years experience as a driver trainer and being involved in psychology, she had seen cases of students having high alcohol consumption when in training. They could be trained in this situation but did not have a memory of it afterwards when sober again; they failed to keep the information. The state of being drunk clearly had different effects on the memory, produced different kinds of memory. They should be sober during the DR, but could they be taught to have safe behaviours while being under influence?



A WP5 team member indicated that the memory capacity is lower when persons were under influence of alcohol.

The Greek participant added that it was possible to train these persons, they understood it all well during the training, but then forgot it the day after.

A WP5 team member indicated that the population in driver training was different from the one in DR. The courses focussed on persons who drank too much and were offenders, so not letting them drink while in the DR was part of the intervention.

### **Existing treatment and rehabilitation structures in Greece**

#### **Political, legislative and training lacks with regard to DR in Greece**

A WP5 team member reacted on the complaints of the presenter of the political/legislative lacks and the lack of training possibilities in Greece, by stating that the aims of DRUID and of WP5 specifically were to give a hand to the concerned people to convince politicians, and to help practitioners to establish good procedures as concerns driver rehabilitation.

#### **Data/records on DUI/DUID in Greece**

A WP5 team member asked whether Greece had data on alcohol/drug offences and whether BAC limits existed?

The Greek presenter gave information about the DUI procedure: a DUI offender is convicted for substance use, goes to court and a forensic expert has to give his opinion on the existence of an addiction problem or not. In case of addiction, one is not capable of self-control and the sentence is 'confinement to an establishment that is appropriate for addicts', but this does not exist in Greece. So these offenders can just continue their substance use and further have accidents/offences etc. One can also have to go to jail after DUI, but then everything stops, there is no further follow-up, no education, treatment, nor tests are provided by law. This is a big difference with the situations abroad where there seem to be much more opportunities for DUI offenders. E.g. Portugal also has its own law for such DR programmes. The presenter hoped to have this in 20 years in Greece as well.

The Greek WP5 team member indicated that in the new traffic law, DUI offenders are not assigned or recommended to undergo consulting or treatment. They just get a fine and in severe cases, points are taken away from the driving license.

#### **Fitness to drive of methadone users in Greece**

Another participant asked whether those using methadone were able to drive in Greece.

The presenter indicated that they drive. Most do not have a driving license but they do drive.

#### **DUI/DUID prevention measures**

A Greek participant remarked that apart from DR measures it would make sense to have preventive measures, e.g. to have an education in addiction centres on DUI/DUID, even without having been in an accident/offence yet. It would be good to include such courses also in other systems.

A WP5 team member indicated that this existed in some countries, e.g. in driving education or with a points system. It was indeed important not only to react after an offence, but also earlier prevention mattered.

### **Classification of drugs in Greece**

A WP5 team member asked what the criteria were to allocate substances to class 1 versus in class 2. The presenter thought it had to do with the severity of the substance (class 1 are the more severe ones).

## **Towards establishing driver rehabilitation programs - case study in Greece**

Was directly followed by the final discussion.

### **Final discussion**

#### **DR as secondary prevention measure**

A WP5 team member stated DR was defined as a 'secondary prevention measure' by the research group as it aimed at avoiding re-occurrence of offences.

#### **High needs with regard to DR in Greece (political/legislative/training) and the possible contributions of DRUID in general and of WP5 in particular**

Another WP5 member asked the presenter on the Greek enforcement about the shown statistics: whether the increased enforcement, which seemed to lead to a decreased number of positive BrAC also went together with the introduction of the BOB campaign. This was affirmed.

The Greek WP5 member continued expressing the high needs Greece currently clearly has with regard to DR – nothing is foreseen for the moment. Efforts should be made on a high level.

Another WP5 team member added that it would be good to establish a network on DR in the EU in order to support countries like Greece. This idea was also already proposed in the expert workshop (in order to share ideas and to give others support and input). WP5 will also develop an evaluation instrument to give a good support and input tool to establish DR, taking all relevant aspects into account.

The Greek WP5 member indicated that this would indeed be a good tool to help develop DR, but that first of all it should be decided that DR is needed. The highest hierarchy (politicians) must be convinced first.

In response to this, the DRUID coordinator stressed the role of the EU project DRUID. He stated that Greece clearly needed directives from the EU and that there were many countries like Greece which still do not have anything regarding DR. There were big expectations of the DRUID results, which would give EU orientation, lead to EU recommendations or, even better, to EU directives. From then on, new laws in all EU Member States might be developed. This is just a matter of time. Politicians have to be informed at present on what scientist networks already know for a long time. Coming to homogenisation in the EU is the aim of DRUID. Member States will have some time to implement the EU recommendations and after some years these recommendations will become directives which all countries have follow.

#### **Different mentality with regard to DR in different countries**

A Greek participant asked if it was the aim of DRUID to give details on required structures of DR.

The WP5 leader indicated that content and procedure guidelines would be developed.

The Greek participant remarked that a DR programme depends on the country. The Greek WP5 team member added that the mentality in different countries varied a lot. What would be most valuable was to develop good practice guidelines and then let the countries decide themselves which fitted best.

The WP5 leader indicated that a frame for DR would be given but also with very concrete elements. Existing DR models might also be overtaken, but indeed even at present DR varied between countries.

#### **Costs of DR for a country – Requirement of an integrated approach against DUI/DUID**

The Greek participant remarked that it would be cheaper for a country to inform young drivers about DUI/DUID instead of putting a lot of effort in DR after violations or accidents.

The WP5 team member answered that both approaches seemed to be necessary. It is important to have an integrated approach.

The DRUID coordinator continued that both approaches were actually prevention: campaigns on a public level and DR on a more individual level, and that all approaches were cheaper than the economical cost of accidents.

Another WP5 member furthermore mentioned that the costs for countries would be relative as in most countries offenders have to pay for the DR themselves.

Several Greek participants finally remarked that the Greek politicians definitely should have been present at the symposium.

### 3 Driver Rehabilitation Evaluation Tool – DRET



# DRET

## Driver Rehabilitation Evaluation Tool

### EU Project DRUID

Driving under the influence of alcohol,  
drugs and medicines

## Work Package 5: Rehabilitation

Contract No. TREN - 05-FP6TR-SO7.61320-518404-DRUID



## DRET - Driver Rehabilitation Evaluation Tool

### What is DRET for?

DRET provides an orientation about driver rehabilitation (DR) measures in your country. By means of the DRET evaluation you can assess how much the DR system or programme(s) applied in your country is/are in compliance with the current EU research status in this field.

DRET is a tool to evaluate new or existing DR measures for **drink driving (DUI)** and/or **drug driving offenders (DUID)**. It is not suitable to evaluate measures that primarily target the treatment of alcohol or drug addiction.

DRET provides a systematic and comprehensive check/evaluation instrument for planned or already existing DR programmes and systems. It offers a tool to find out if the relevant elements regarding the establishment and operation of DR measures for DUI/DUID offenders are included or whether there are still any gaps or weak points which should be improved.

DRET is based on the DRUID research in Work Package (WP) 5 (Rehabilitation) which focussed on a thorough and comprehensive investigation on all relevant DR issues for DUI/DUID offenders. The WP5 activities included the conduction of a review based on international publications and expert knowledge in this field, a European-wide DR provider survey, an empirical study on recidivism despite of having participated in a DR course, an analysis of the change process based on a large European sample of DR course participants and a review of quality management systems in DR and addiction treatment. DRET considers these research findings and provides a tool regarding good practice for a DR programme and system.

### For whom is DRET useful?

DRET is a support and serving tool for different user groups who are working in the field of DR, who are planning to implement such kind of measure, who are responsible for DR services, its quality and efficiency. This includes above all developers and providers of DR services and programmes, authorization or accreditation bodies for DR measures, traffic safety experts, researchers or scientists.

### How is DRET structured?

DRET is structured as follows:

- Input sheet for basic evaluation data;
- DRET-S (National System level): restricted to the evaluation of frame conditions for DR systems in a country;
- DRET-P (Single Programme level): restricted to the evaluation of a single DR programme.

Based on the user's concern or purpose, either both parts of DRET or only one of them can be relevant for evaluation. For example, if a developer of a single DR programme wants to evaluate its compliance with the DRUID WP5 research results on DR, DRET-P is sufficient. Or if an implementation of DR in a country is planned DRET-S is of special importance.

Please note: Each DR programme has to be evaluated separately !



## How to use DRET?

By using DRET you can compare your national DR system or single DR programme(s) to the DRUID WP5's identified good practices.

DRET is an evaluation tool which consists of three columns:

Evaluation scheme	Evaluation content	DRUID WP5 research outcomes
<p>It provides an assessment of each DRET content as follows:</p> <p><input checked="" type="checkbox"/> <b>yes</b> =&gt; fulfilled</p> <p><input checked="" type="checkbox"/> <b>partly yes</b> =&gt; partly fulfilled</p> <p><input checked="" type="checkbox"/> <b>no</b> =&gt; not fulfilled</p> <p><input checked="" type="checkbox"/> <b>don't know</b> =&gt; cannot be evaluated yet.</p>	<p>It contains the concrete topics to be assessed.</p>	<p>It provides relevant information on corresponding DRET topics.</p> <p>These DRUID WP5 research outcomes either reflect scientific common sense or refer to issues under scientific discussion.</p>

In principle, answering could be done either in an electronic or paper-pencil mode by marking or ticking on (electronic mode) the corresponding category of the evaluation scheme.

## What are the DRET results for?

The colour system clearly shows the evaluation results of the DR measure (system or single programme) in question.

In general, the DRET respondents are free to decide how to use the evaluation outcomes, either just as a feedback on the state of the art or as an input for improvements of the DR measure having been evaluated.

Regarding improvements - in order to fulfil the essential requirements according to DRUID WP5 - the categorical evaluation scheme implies:

**“yes”** => no further action is required

**“partly yes”** => some improvements are suggested

**“no”** => improvements or changes are highly recommended

**“don't know”** => additional information is needed for evaluating the corresponding content.

The DRUID WP5 deliverables provide further detailed information on specific DR issues regarding possible improvements:

Deliverable 5.1.1 - State of the Art on Driver Rehabilitation: Literature Analysis & Provider Survey

Deliverable 5.2.1 - Good Practice: In-Depth Analysis on Recidivism Reasons & Analysis of Change Process and Components in Driver Rehabilitation Courses

Deliverable 5.2.3 - Quality Management Systems established along with Driver Rehabilitation Schemes

## Abbreviations:

BAC	Blood alcohol concentration
DR	Driver Rehabilitation
DRET	Driver rehabilitation evaluation tool
DRUID	EU-Project: Driving under the Influence of Drugs, Alcohol and Medicines
DRUID WP 5	DRUID Work Package 5 (Rehabilitation)
DUI	Driving under influence of alcohol
DUID	Driving under influence of (illicit) drugs
P	Programme level
S	System level
QM	Quality management



## DRET - Driver Rehabilitation Evaluation Tool

Driver rehabilitation (DR) for DUI (drink-driving) / DUID (drug-driving) offenders

**Evaluation of DR to be carried out (please indicate):**

- on national system level only (DRET – S)  
 on single programme level only (DRET – P)  
 both, on system and programme level (DRET – S and DRET – P)

**Name of programme (in case of a DR programme evaluation):**

**Name of evaluator(s):**

**Comments:**

**Date of evaluation:**



## DRET - S

### Driver Rehabilitation Evaluation Tool – National System Level

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<b>LEGAL IMPLEMENTATION - GENERAL CONDITIONS</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR measures are part of a comprehensive countermeasure system for DUI/DUID</b>	Besides the DR system itself this implies for instance: <ul style="list-style-type: none"> <li>• Regulations for measures of detection and prosecution of DUI/DUID offenders exist (e.g. mandatory roadside breath/drug tests or other evidentiary methods);</li> <li>• Central registry system of traffic offenders - including DUI/ DUID - is installed in the country and supports that high risk offenders are detected;</li> <li>• DR should be an additional measure to other sanctions (e.g. driving license withdrawal) but should not replace them.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Legally regulated DR participation</b>	<ul style="list-style-type: none"> <li>• Participation in DR is mostly legally regulated, mainly by the licensing authorities and to a less degree also by courts. Thereby, participation is not always obligatory, about half of the programmes are voluntary ones.</li> <li>• Consequences of participation are mostly linked to licensing (re-licensing, licence reinstatement, reduction of suspension periods, ongoing validity of licence), but also to a penalty point system, to an upcoming driver assessment or to criminal prosecution.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Linkage of DR with licensing procedure</b>	Examples for linkage are: <ul style="list-style-type: none"> <li>• DR programmes are combined with licence disqualification periods;</li> <li>• DR participation is a precondition for re-licensing;</li> <li>• DR participation supplements other licensing actions;</li> <li>• DR participation is an accompanying measure to licence suspension;</li> <li>• DR participation is an accompanying measure for licence prolongation.</li> </ul>





<b>LEGAL IMPLEMENTATION - SPECIFIC DR REQUIREMENTS</b>		
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input checked="" type="checkbox"/> no <input type="checkbox"/> don't know	<b>Availability of target group(s) specific programmes</b>	<ul style="list-style-type: none"> <li>• DUI/DUID offenders are a heterogeneous group and there is general agreement on the relevance of identifying various types of DUI/DUID offenders with regard to their different needs and opportunities for rehabilitation.</li> <li>• Two groups, namely non-addicts and addicts should at least be distinguished as they require different interventions or treatments.</li> <li>• The majority of the European programmes already differentiate between DUI and DUID offenders and general traffic offenders. Addiction is a very common exclusion criterion for the European DR programmes.</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input checked="" type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of standards for programme operation</b>	<ul style="list-style-type: none"> <li>• Regulations for time frame of programme operation exist (at least total duration, number of sessions and/or units, duration of sessions/units).</li> <li>• Regulations for successful course completion exist (at least no alcohol or drug intoxication, co-operation, attendance of all sessions).</li> <li>• Regulations for non-completion exist.</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input checked="" type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of exceptional rules</b>	<ul style="list-style-type: none"> <li>• Exceptions from the normal DR procedure due to individual conditions are specified.</li> <li>• Special services are mostly offered due to communication problems/operation of programme in different languages or in a single setting, e.g. with an interpreter.</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input checked="" type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of DR provider requirements</b>	<ul style="list-style-type: none"> <li>• Qualification criteria for authorizing providers are laid down (at least appropriate DR programme(s), necessary staff and infrastructure).</li> <li>• Procedure of acquiring, maintaining and losing DR authorization is defined.</li> </ul>



<b>ASSIGNMENT to DR</b>		
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of formal criteria on national level in order to assign offenders directly to a DR programme or to driver assessment prior to DR</b>	<ul style="list-style-type: none"> <li>In most of the DR programmes the substance and/or the amount of intoxication (e.g. BAC-level) during the offence determine course participation.</li> <li>Recidivism is the second frequent assignment reason to DR.</li> <li>Driver assessment is necessary to identify DUI/DUID addicts including offenders in substitution therapy in order to assign them to adequate intervention.</li> <li>Driver assessment should at least be carried out in the following cases:             <ul style="list-style-type: none"> <li>Offenders with a BAC of 1.6‰ and more;</li> <li>Re-offending within five years;</li> <li>Refusal of alcohol/drug test.</li> </ul> </li> </ul>
<b>QUALITY MANAGEMENT (QM) in DR</b>		
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of national QM standards</b>	<p>This refers to obligations for DR providers regarding:</p> <ul style="list-style-type: none"> <li>Management and staff related elements (e.g. standards of documentation, data protection, trainer qualification);</li> <li>DR operation and programme(s) (e.g. availability of breath tests for assessing intoxication during course, scientific background of programme, evaluation studies).</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Existence of national QM body</b>	<ul style="list-style-type: none"> <li>A national QM body is necessary to assure a specified service quality in DR.</li> <li>The QM body should have an authoritative position to execute the operative tasks.</li> <li>The QM body should be independent from DR providers.</li> </ul>
<input type="checkbox"/> yes <input type="checkbox"/> partly yes <input type="checkbox"/> no <input type="checkbox"/> don't know	<b>Definition of operative tasks of QM body</b>	<p>QM body should be responsible for:</p> <ul style="list-style-type: none"> <li>Authorisation of DR providers and programmes &amp; maintenance;</li> <li>Examination of DR providers internal quality in regular time intervals;</li> <li>Verification in case of suspicion of quality violations according to a defined procedure;</li> <li>Imposition of consequences and improvements in case of verified lack of quality.</li> </ul>



## DRET – P

### Driver Rehabilitation Evaluation Tool – Single Programme Level

**DRIVER ASSESSMENT prior to DR (only to be evaluated if applicable)**

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Implementation of a multidisciplinary approach</b>	<p>In case of additional driver assessment prior to DR the following issues have to be taken into account:</p> <ul style="list-style-type: none"> <li>• For DUI and DUID offenders, the assessment approach is mainly psychological; medical examinations are conducted as well.</li> <li>• The medical examination of offenders essentially focuses on substance use disorders within a fitness to drive evaluation.</li> <li>• The psychological examination can provide essential information with regard to the psychological and social aspects related to the problem behaviour.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Application of objective, valid and reliable assessment tools</b>	<ul style="list-style-type: none"> <li>• A wide range of screening and assessment measures exist which provide information about the problem severity and consumption pattern.</li> <li>• Traffic psychological assessment tools are very fine-tuned to the specific problems of DUI/DUID offenders and are often validated on this population.</li> <li>• Objective measurements regarding substance use disorders that can be applied are e.g. biological markers, screening tools of substance use and functional/performance testing.</li> </ul>



## DRET – P

### Driver Rehabilitation Evaluation Tool – Single Programme Level

Evaluation Scheme	Evaluation Content	DRUID WP5 research outcomes
<b>DR PROGRAMME OPERATION</b>		
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Separation of DUI and DUID offenders</b>	<ul style="list-style-type: none"> <li>The vast majority of European DR programmes do not mix DUI and DUID offenders.</li> <li>Additionally, DUI and DUID offenders should not be mixed with other traffic offenders.</li> <li>Most of the programmes do not consider further DUI and DUID subgroups (e.g. novice drivers, re-offenders).</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Separation of non-addicts and addicts</b>	<ul style="list-style-type: none"> <li>Addiction is a common exclusion criterion in most European DR programmes.</li> <li>For offenders using alcohol or drugs in a dependent way, addiction-specific treatment is necessary.</li> <li>In general, DR is an established intervention in about half of the Member States for non-dependent DUI offenders; only a few carry out DR for non-dependent DUID offenders.</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Existence of entry criteria</b>	<ul style="list-style-type: none"> <li>Regarding programme access addicts are mostly not subject of DR programmes for DUI or DUID offenders. They need addiction treatment which differs from the common DR intervention.</li> <li>Special DR services should be provided at least for the following DUI/DUID non-addict offenders:             <ul style="list-style-type: none"> <li>In case of language deficits (e.g. operation in native language);</li> <li>In case of special conditions (e.g. operation in a single intervention).</li> </ul> </li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Existence of exclusion criteria during course operation</b>	<ul style="list-style-type: none"> <li>Detailed conditions for successful completion are defined.</li> <li>Obligations and rights of course participants include at least             <ul style="list-style-type: none"> <li>Sobriety;</li> <li>Non use of drug(s);</li> <li>Punctuality;</li> <li>Active participation;</li> <li>Attendance in all sessions;</li> <li>Confidentiality.</li> </ul> </li> <li>Agreement to these obligations, rights and consequences in case of non-compliance is ensured in a participant-provider contract.</li> </ul>



<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of programme setting</b>	<ul style="list-style-type: none"> <li>Group interventions are the most common DR approach and can be used for a wide range of substance impaired offenders. A lot of appropriate concepts for group interventions exist. The number of participants is limited (preferable 6-10 for group dynamic reasons).</li> <li>Single interventions can be an appropriate DR approach for specific problem constellations although equivalent concepts like for group interventions are rare.</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of trainer/course leader's qualification</b>	<ul style="list-style-type: none"> <li>In two-thirds of the European DR programmes trainer qualification is legally regulated.</li> <li>Minimum standards should at least be defined on provider level</li> <li>Currently, most of the trainers are psychologists with further education.</li> </ul>
<b>PROGRAMME CONTENTS</b>		
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Specification of aims</b>	<p>The aims of the DR programme are clearly defined and include the following as a minimum:</p> <ul style="list-style-type: none"> <li>Attitude and behavioural change to avoid re-offending (e.g. modification of substance consumption patterns);</li> <li>Strategies to avoid re-offending (e.g. development of alternative/new behaviour);</li> <li>Problem awareness regarding substance impaired driving;</li> <li>Basic knowledge (e.g. legal consequences, impairment effects of substances).</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Programme development on a scientific basis</b>	<p>Scientific standards of DR programme development include at least:</p> <ul style="list-style-type: none"> <li>Literature analysis regarding problem behaviour and rehabilitation concept;</li> <li>Explanation of the theoretical concept for attitudinal and behavioural change;</li> <li>Aim(s), contents and intervention steps;</li> <li>Specification of target group(s);</li> <li>Documentation of the programme in a manual.</li> </ul>
<input checked="" type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of principle DR approach</b>	<ul style="list-style-type: none"> <li>Psychological and therapeutic approaches with educative elements are the most promising ones.</li> <li>The concept of European standard group interventions has proven to be effective for offenders without substance use disorders.</li> </ul>



<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports self-observation and reflection</b>	<p>“Self-observation and reflection” is found to be a very relevant success factor in DR interventions according to European DR providers.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports development of alternative/new behaviour</b>	<p>“Development of alternative or new behaviour” is another very relevant success factor according to WP5 research results.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports discussion and confrontation</b>	<p>“Discussion and confrontation” is a further very important success factor of DR programmes.</p>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>DR programme supports an open and trustworthy group climate</b>	<p>“Open and trustworthy group climate” is a relevant success factor of DR programmes as well.</p> <p>Further relevant success factors are</p> <ul style="list-style-type: none"> <li>• Emotional experiencing and involvement;</li> <li>• Achievement of behavioural goals/self control;</li> <li>• Goal setting and commitment to stick to them;</li> <li>• Information;</li> <li>• Emotional verbal/non verbal expressing.</li> </ul>
<b>PROGRAMME EVALUATION</b>		
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Evaluation on the DR programme</b>	<ul style="list-style-type: none"> <li>• Regular evaluation studies are a core element to steer service quality.</li> <li>• The evaluation results should be available for the scientific community and the general public.</li> <li>• Evaluation results trigger programme improvements.</li> </ul>
<input type="radio"/> yes <input type="radio"/> partly yes <input type="radio"/> no <input type="radio"/> don't know	<b>Definition of evaluation criteria</b>	<ul style="list-style-type: none"> <li>• The most relevant road safety outcome criterion is recidivism rate. An average reduction rate of 45.5% was observed for European standard group intervention programmes.</li> <li>• Overall participant feedback provides useful information about client satisfaction and achieved changes.</li> <li>• Further outcome and process evaluation criteria can be related to content, method, trainer-participant relation, participant-participant relation, individual change.</li> </ul>