

Via sicura

Federal Action Programme
for Greater Road Safety

Federal Roads Authority FEDRO
2005



Via sicura

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for Greater Road Safety

Contents

Foreword

1 Why an action programme?

1.1 Road traffic accidents in Switzerland	4
1.2 The downside of present-day mobility	6
1.3 What has been done to date?	6
1.4 Comparison with rail and air transport	8
1.5 Swiss road safety by international comparison	8
1.6 International cooperation	10
1.7 What needs to be done?	11

2 The path to the Via sicura action programme

2.1 Tasks assigned by the Department and the Federal Council	13
2.2 Vision Zero for road transport	13
2.3 The VESIPO project	14
2.4 Aim and purpose of the report	16

3 Objectives, action required and fields of action

3.1 Systematic development of the action programme	17
3.2 Via sicura's principal objective	17
3.3 Via sicura's main and subsidiary objectives	18
3.4 The action required for road safety today	19
3.5 The Via sicura fields of action	21

4 Guiding strategies and measures

4.1 From action required to selecting measures (procedure)	23
4.2 Guiding strategies and measures in the individual fields of action	27
Field of 'Awareness-raising and education'	27
Field of 'Training and further training'	29
Field of 'Regulations on conduct'	30
Field of 'Control and sanction systems'	32
Field of 'Motor vehicle'	34
Field of 'Road infrastructure'	36
Field of 'Quality assurance'	38
Field of 'Research and statistics'	41
Field of 'International cooperation'	43
Field of 'Organisation and resources'	44
4.3 Assessing the effectiveness of the planned measures	45

5 Financial, legal and other consequences of Via sicura

5.1 Costs and benefits of Via sicura	48
5.2 Financing costs not covered by the public purse	50
5.3 Legislative amendments required	52
5.4 Relationship to international law	52
5.5 Effects on society, the economy and the environment	53
5.6 Conclusions	54

6 Implementation planning

6.1 Report to the Federal Council	55
6.2 Legislation	55
6.3 Allocation of roles and organisation	57
6.4 Communication	60

Summary

Annex I: Via sicura: Overview of measures (including rating)

Annex II: List of participants in the VESIPO Project

Via sicura

Federal Action Programme
for Greater Road Safety

Foreword

The roads can be made safer!



"The via can be sicura."

What is your safety worth to you? Have you ever asked yourself before setting out somewhere on foot, by bicycle or by car just what the risks are and whether you have enough insurance cover?

Every year, over 500 people are killed on Switzerland's roads and more than 6,000 are seriously injured. One person in every hundred is killed on the roads, and one in ten suffers serious injury on average once in their lifetimes. This is an enormous risk – we cannot and must not simply stand by and accept the daily tragedy played out on our roads.

The Federal Council wants to cut the number of road traffic fatalities and serious injuries by 50 per cent between 2000 and 2010. The roads can be made safer – the via can be sicura. In order to reach the 50 per cent goal, further efforts will have to be made and, most importantly, there will have to be a paradigm shift in attitudes towards road traffic safety issues.

The Via sicura Action Programme shows us how this goal can be achieved. It has been developed by some 80 experts representing professional organisations, associations, cantonal and communal authorities and political and business circles. The result is a package of effective and realistic measures that has garnered widespread support and broad acceptance.

However, safety has a price. The action programme is a kind of policy whose aim is to sharply reduce the risks you run as a road user. The premiums will be invested in the measures the programme suggests and will bear fruit later in the form of savings on today's high accident costs. These savings will exceed the amounts invested so that, from an economic point of view, the whole action programme is amply justified and will be to the advantage of all road users.

It is now up to the Federal Council and parliament to take the decisions needed to implement the new road safety policy.

I should like to express my thanks to all those who helped draw up the action programme and placed their expertise at the service of road safety. It would give me great satisfaction were it to prove politically possible to bring all these campaigners for road safety together again for the implementation of Via sicura.

Dr Rudolf Dieterle
Director

A handwritten signature in black ink, appearing to read 'R. Dieterle', with a long horizontal stroke extending to the right.

1 Why an action programme?

1.1 Road traffic accidents in Switzerland

Steady decrease since 1971

Since the peak of 1,773 deaths and 18,785 serious injuries in 1971, Switzerland has made considerable progress in terms of road safety. Despite the fact that the volume of traffic has doubled, the number of deaths and serious in-jurious resulting from road accidents has been steadily brought down, to around a third.

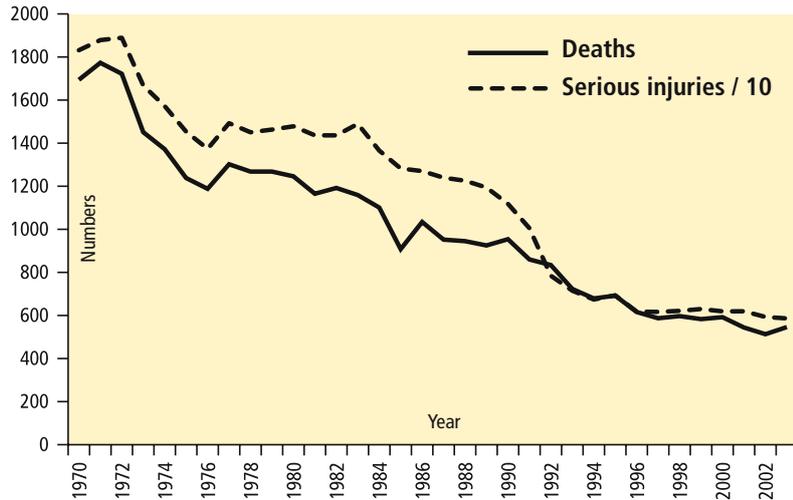


Fig. 1: Deaths and serious injuries on the road since 1970 (Source: SFSO)

Little change since the late 1990s

In the late 1990s, the number of accident victims remained static at around 600 deaths and slightly over 6,000 serious injuries. In 2001 and 2002, there was a further marked fall in the number of deaths. Unfortunately, however, this trend did not continue in 2003: though the number of serious injuries fell slightly, the number of deaths rose once again.

Year	Deaths	Serious injuries
1996	616	6177
1997	587	6116
1998	597	6213
1999	583	6299
2000	592	6191
2001	544	6194
2002	513	5931
2003	546	5862

Table 1: Accident figures for Switzerland 1996–2003 (Source: SFSO)

Categories of road accidents

Road accidents can be classified by group of persons, location and type, and by driver error and impairment. Traffic fatalities and injuries occur in the following groups of road users:

Deaths	Serious injuries	Road users concerned
48%	38%	Car occupants
18%	27%	Motorcyclists
16%	12%	Pedestrians
9%	15%	Cyclists
3%	4%	Moped riders

Table 2: Accidents by type of traffic and road user (Source: SFSO)

A quarter of all those who die or are seriously injured on the road are young people between the ages of 16 and 26. Pedestrian casualties include a majority of old people and children, while among cyclists most of the victims are children and young people. Most road deaths occur outside built-up areas, while most serious injuries occur in town. The location has no bearing on the most common accidents.

Proportion	Type of accident
19%	Collision with a fixed obstacle off the road
15%	Accident while turning left
11%	Collision between a vehicle and a pedestrian
9%	Skid or self-induced accident with no collision

Table 3: The most common accidents (Source: SFSO)

The errors and influences referred to most frequently in reports on accidents resulting in death or serious injury are as follows:

Deaths	Serious injuries	Error / influence
28%	16%	Speeding
18%	12%	Impairment, for example by alcohol
15%	18%	Inattention / distraction
9%	16%	Failure to give right of way

Table 4: The most common errors and influences (Source: SFSO)

1 Why an action programme?

1.2 The downside of present-day mobility

Mobility is of enormous consequence

Mobility plays an important social and economic role in modern life. It therefore cannot and must not be restricted. At present, however, the social cost of mobility is all too high.

Human suffering

Road accidents can cause incalculable suffering. The victims often endure social losses, personal anxiety and worries and financial problems. For this reason alone, the loss of life and severe health difficulties cannot simply be ignored, still less accepted. Today, mobility need not come at such a high human price.

The economic costs generated by road accidents run to around CHF 13 billion every year, including a very conservative estimate of the intangible harm suffered by the victims (this figure is based on the 1998 report on the cost of road and rail accidents in Switzerland, published by the Federal Office for Spatial Development [2002] and takes account of current accident figures and intervening price changes).

The impact of these costs on the individuals concerned is reflected, for example, in the non-occupational accident insurance figures, which show that road accidents now account for more than 40 % of insurance payments (Accident statistics UVG 1998 – 2002, SUVA [2004]).

Economic costs

Not only do road accidents cause unspeakable suffering, they also generate high economic costs. These include the costs of rescue services and medical care, of making good material damage, and police, legal and administrative expenses. To this must be added the cost in the workplace of replacement staff and of any net loss in production, and the intangible losses suffered by individual accident victims.

Measures adopted in the past 20 years

The fact that the roads have become safer in recent decades may be ascribed to many different measures and factors. Contributing factors include the introduction of speed limits, mandatory seatbelt and helmet use, advances in automotive engineering, improvements in the road network, enhanced driver training and traffic calming measures in residential areas.

1.3 What has been done to date?

Earlier studies and concepts aimed to promote road safety in Switzerland and, to this end, placed greater emphasis on the duties of the Confederation. Two reports in this regard were particularly important: 'Combating road accidents in Switzerland', published in 1969 by the study group appointed by the Federal Department of Justice and Police (FDJP), and 'Safety on the Road – Strategies and Measures for the 1990s', published in 1993 by the FDJP Road Safety Experts Group. The Federal Council took note of both, though without issuing any specific instructions for their implementation.

**Amendment of
Road Traffic Act
in 2001**

With the amendment of 14 December 2001 of the Road Traffic Act (RTA), parliament paved the way for further promising safety measures. The most important are the reduction of the blood alcohol concentration limit to 0.5 mg/ml, the improvements to permit 100 % reliable breath-tests, a stricter system for withdrawing driving licences, the probationary driving licence and the introduction of two-phase driver training. All the amendments to the Road Traffic Act will have entered into force by the end of 2005.

Intersection accident caused by failure to give right of way

A driver ran a red light at a crossing and crashed into a car that was being driven correctly. The driver who caused the accident was killed outright. The other driver was seriously and her passenger slightly injured.

In 2003, failure to give right of way caused:

- 33 fatal accidents
- 343 accidents with serious injuries



Via sicura measures intended to prevent accidents caused by failure to give right of way:

- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- increased traffic controls

1 Why an action programme?

1.4 Comparison with rail and air transport

Higher standards in rail and air transport

The safety standards that apply to rail and air transport are significantly higher than those that apply to the roads. Accidents resulting in death and serious injury are simply unacceptable in the air or on the tracks. Both systems have a zero tolerance policy towards accidents. All accidents and most 'near-misses' are exhaustively investigated and the findings generally result in appropriate measures to eliminate the causes.

The roads compare badly

By comparison with rail and air, road transport causes far more deaths and injuries. Between mid-2001 and 2003, 31 people were killed and 44 seriously injured in rail accidents in Switzerland; 28 people were killed and 9 seriously injured in accidents involving aircraft. During the same period, 534 people were killed on the roads and 5,996 seriously injured. On a person-per-kilometre basis, four times as many people died on the roads as in rail accidents in 2001. On a per-hour-travelled basis, the risk of a fatal accident is ten times higher in a car than in an aircraft.

There are no easy comparisons

When making comparisons with other types of transport, it must be borne in mind that there is a much greater potential for conflict in road traffic, where the vast majority of drivers are private individuals and not professionals. Although from the safety point of view, these differences should not weigh in the balance – rail and air transport must set the standard – the special characteristics of road transport must obviously be taken into account when devising specific approaches to improving safety.

1.5 Swiss road safety by international comparison

Worldwide, the number of road accident victims is increasing

It is estimated that 1.18 million people were killed and between 20 and 50 million injured on the roads worldwide in 2002. The World Health Organisation (WHO) forecasts that by 2020 the number of victims of road accidents will fall by around 30 % in the high-income countries but increase worldwide by 60 %. This means that road accidents will climb to third place on the WHO list of causes of death (as against ninth place in 1990).

Downward trend in Europe

In the 15 states of the European Union (pre-enlargement), the number of vehicles on the road has tripled over the last 30 years, while the number of road deaths has been halved. Thus, the accident figures in the EU and Switzerland have been reduced in the same proportion in relation to total traffic volume.

A comparison of road death rates per country

The following table presents the current figures for road deaths (serious injuries are not listed for lack of comparative data). Switzerland ranks ahead of its neighbours and comes just behind the leading EU group, consisting of the United Kingdom, Sweden and the Netherlands.

	per million inhabitants				per billion vehicle-kilometres				Total (absolute)			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
UK	60	60	60	61	7	...	7	7	3 580	3 598	3 431	3 508
S	67	66	60	59	...	...	...	...	591	583	532	529
NL	68	62	61	64	...	...	8	...	1 082	993	987	1 028
CH	83	75	71	75	11	10	8	9	592	544	513	546
D	91	85	83	80	12	11	10	10	7 503	6 977	6 842	6 613
I	111	116	117	...	...	...	...	...	6 410	6 682	6 736	...
A	120	118	119	115	13	13	12	12	976	958	956	931
F	138	138	129	102	15	15	14	...	8 079	8 160	7 655	6 058

Table 5: Road deaths between 2000–2003 (Source: IRTAD/SFSO)

Fresh efforts in France and Italy

France and Italy have recently given a perfect demonstration of how effective decisive political action can be. In France, the number of road deaths and serious injuries was reduced by more than 20 % in one year (2003), through a combination of stiffer penalties, efficient traffic controls and information campaigns. In Italy, the announcement of drastically increased penalties recently led to a 20 % drop in the number of road deaths. Both countries, however, started out from a relatively poor standard of safety, and this, as experience has shown, makes improvements easier to achieve.

Action plans and programmes abroad

In recent years, many European countries have laid down a national plan of action or road safety programme and/or quantified road safety targets. They include Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, the United Kingdom, Ireland, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Spain and Sweden.

Targets set by the leaders in road safety: UK, S, NL

The three countries which lead the field in road safety have set themselves the following targets to reduce the number of victims of road accidents:

- In the United Kingdom, once the 1987 target for reductions by 2000 was exceeded various new targets were set for 2010: 40 % reduction in deaths and in serious injuries; 50 % reduction in the number of children killed and seriously injured, and a 10 % reduction in accidents resulting in minor injuries.
- In 1997, Sweden laid down its Vision Zero targets for 2000 (25 % reduction in road deaths) and 2007 (50 % reduction). Although there is as yet no statistical evidence that these targets have been met, Sweden still ranks second in the world in terms of road safety.

1 Why an action programme?

- In 1990, the Netherlands laid down its 'Sustainable Safety' targets for reductions by 2010: 50 % fewer deaths and 40 % fewer hospitalisations after road accidents.

1.6 International cooperation

Shared responsibility

Despite the fact that increased road safety in each country depends primarily on measures at national level, cooperation, exchanges of experience and harmonization at international level are now also vitally important. Accordingly, various international organisations are working to promote road safety, including the United Nations Economic Commission for Europe (UNECE), the World Health Organisation (WHO), the Conference of European Ministers of Transport (CEMT) and the European Union (EU).

UNECE: agreements and resolutions

One of UNECE's priority aims is to facilitate the international transport of passengers and goods and to ensure their safety. It has adopted numerous road safety agreements and various resolutions to this end. For example, consolidated resolutions call on the member states to incorporate measures concerning road traffic rules and technical controls for vehicles into their national laws, and recommend that they adopt measures concerning alcohol, speed limits, communication, education, training, pedestrians, cyclists, children and so on. Switzerland is represented in many UNECE working groups, including WP.1 (Working Party on Road Traffic Safety).

EU White Paper and Action Programme

In its 2001 White Paper entitled 'European transport policy for 2010: time to decide', the European Commission set itself the target of halving the number of road deaths by 2010. In addition, the Commission has developed the 'European Road Safety Action Programme' ('Saving 20,000 lives on our roads – A shared responsibility', 2003). The programme proposes a total of 60 measures relating to traffic behaviour, vehicle safety, road infrastructure, commercial transport of goods and passengers, the rescue and care of accident victims, and the compilation, analysis and dissemination of accident data. The Commission has also launched the 'European Road Safety Charter', which is to involve as many Action Programme decision-makers as possible.

United Nations General Assembly resolutions

In 2003 and 2004, the United Nations General Assembly also deliberated on global road safety, underscoring its importance. The most recent resolution on the subject, adopted on 14 April 2004, invites WHO, working with the regional UN Commissions – i.e. including UNECE – to act as a coordinator on road safety issues within the UN system.

In 2003 and 2004, the EU transport ministers meeting in Verona expressly confirmed the urgent need for action on road safety and proposed a number of measures (Verona Declaration of 24 October 2003 and Verona Conclusions of 26 October 2004). Switzerland was invited to attend and took part in the work of the meeting.

CEMT The Conference of European Ministers of Transport (CEMT), of which Switzerland is a member, has promoted the exchange of best practice for many years and, through recommendations, has repeatedly underscored its desire to improve road safety. In Bucharest in 2002, the transport ministers declared themselves in favour of the development of a global vision and the establishment of quantified targets.

1.7 What needs to be done?

Develop a coherent policy

Considerable success has already been achieved in improving road safety (see section 1.1). However, the piecemeal approach of the past no longer suffices to bring about marked success. What is now needed is a coherent and comprehensive long-term policy based on the new safety philosophy of Vision Zero (see section 2.2), with an overall strategy encompassing clearly defined targets and measures.

Erratic course of an elderly driver

A confused 70-year-old driver ignored various warning signs and drove across a tram stop. On the adjoining pavement, his car crashed into two benches. One of the three women sitting there was killed on the spot.

In 2003, momentary lapses resulted in:

- 17 fatal accidents
- 159 accidents with serious injuries



Via sicura measures intended to prevent accidents caused by drivers with impaired fitness to drive:

- standardising the conditions for fitness to drive
- periodical testing of fitness to drive
- quality assurance for impaired driving declaration

Show extraordinary commitment

Achieving the targets will require not only extraordinary efforts but also an extraordinary political and administrative commitment. The support of all levels of the political system will be needed to create the legal and financial framework conditions for greater road safety. In future, road safety issues will need to be taken up more rigorously at all levels of the administration, and the necessary arrangements for the measures of improvement pursued with determination.

Promote cooperation

In the intensification of road safety policy, cooperation between all federal, cantonal and communal players and at the international level is especially important. The Confederation will not be able to make further progress in accident prevention on its own. Accordingly, it must promote the cooperation of all stakeholders at home and abroad and strive for coordinated action.

Pedestrian killed by a car that failed to give right of way

A schoolchild was standing at a pedestrian crossing. A vehicle coming from the right stopped and the child started to run cross the road. However, a car coming from the left failed to brake and hit the child at 50 km/h.

In 2003, failure to give right of way to pedestrians caused:

- 26 fatal accidents
- 274 accidents with serious injuries



Via sicura measures intended to prevent pedestrian accidents involving children:

- traffic calming measures
- elimination of potential danger spots
- elimination of accident black spots
- mobility and safety education at all levels of education
- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers

2 The path to the Via sicura Action Programme

2.1 Tasks assigned by the Department and the Federal Council

DETEC assignment, bfu report

In May 2000, Federal Councillor Moritz Leuenberger, the head of the Federal Department of Environment, Transport, Energy and Communication (DETEC), instructed the Federal Roads Authority (FEDRO) to lay the foundation for the development of a federal road safety policy based on the Vision Zero philosophy, i.e. no deaths or serious injuries on the road. The groundwork was then carried out under a research contract by bfu (the Swiss Council for Accident Prevention), which presented its findings in May 2002 in the form of a final report entitled 'Development of the bases for a federal road safety policy' (see section 2.3).

The leitmotiv: sustainable development

The new road safety policy has been an integral component of the Federal Council's 'Sustainable Development Policy' (Measure 17) since 2002. Through the integrated Vision Zero policy, the Federal Council aims to put an end to deaths and serious injuries on the road, though without restricting mobility. It intends to reduce the number of road deaths by 50%, from 600 to 300, within ten years. With this goal in mind, the Federal Council resolved in July 2002, at the request of DETEC, to continue its work for the new road safety policy and to call on DETEC to prepare the necessary measures and amendments to the law.

2.2 Vision Zero for road transport

Vision Zero – a new safety policy

Vision Zero is a safety policy based on the conviction that accidents resulting in deaths and serious injuries are unacceptable under any circumstances. Though the ideal of road transport without deaths and serious injuries remains a distant prospect, it is this 'vision zero' that will serve as Switzerland's inspiration for its future road safety policy. It is a vision that has already served as a model for industry and transport operators for decades (see 1.4 above). It was first adopted as the official line for road traffic by the Swedish parliament in October 1997.

A constitutional mandate

Vision Zero is also grounded in Switzerland's Federal Constitution, Article 10 of which stipulates the "right to life and personal liberty" and includes the right to physical and intellectual integrity. The adoption of Vision Zero as the ideal for safety on Swiss roads is evidence of the Confederation's determination to do everything it can to comply with this provision of the Constitution as concerns road safety as well.

Shared responsibility

Road users are responsible for their behaviour. Greater effort must be made to encourage and enable them to behave safely on the road. The fact remains, however, that people make mistakes, no matter how well-intentioned or responsible they are. In accordance with the

2 The path to the Via sicura Action Programme

philosophy underlying Vision Zero, the authorities must therefore – and this is one of their jobs – organise the road transport system in such a way that failure to avoid making mistakes has as few fatal consequences as possible for the person at fault and especially for those not at fault.

Forgiving roads

The internationally-recognized concept of 'forgiving roads' that forms part of the Vision Zero philosophy includes the following elements:

- Dangerous behaviour should be prevented whenever possible by technical measures.
- If an accident does occur, structural and technical safety measures should offer protection against serious injury.
- If injuries occur which could not be prevented, the consequences should be minimised through optimally effective rescue measures.

The fact that roads and vehicles are designed to be forgiving should not in any way relieve road users of their responsibility to behave safely but should simply play a supplementary role in ensuring that accidents do not have fatal consequences.

2.3 The VESIPO project

Project terms of reference

The project, started under the leadership of FEDRO in 2002, was assigned the task of formulating and establishing a new federal road safety policy (VESIPO). The first stage in this process, which grew out of the bfu final report (see section 2.1), was to determine the individual elements of the policy and to draft a politically acceptable action programme. The present report brings the first stage to a close.

Via sicura: the successor to VESIPO

The second stage now consists of establishing and implementing the new road safety policy. The requisite plan of action was developed within the framework of the VESIPO project (see sections 5 and 6), which will henceforth be corrected and implemented under the new project name 'Via sicura'.

Political terms of reference

The Federal Council based the VESIPO project on two policy cornerstones: the Vision Zero safety philosophy and the target for the first ten years of halving the number of deaths and serious injuries (see 2.1). VESIPO was to set in train the rest of the decision-making process on this basis.

Participatory approach

To ensure that the new policy would receive early support from as wide a circle as possible, the VESIPO project adopted a participatory approach. As far as possible, the new road safety policy would be developed on a bottom-up basis, drawing from a broad spectrum of expertise and experience. Given that road safety involves a wide

range of actors at various levels, DETEC/FEDRO took the view that involving them in the project directly would be the best way of ensuring the project's subsequent translation into policy.

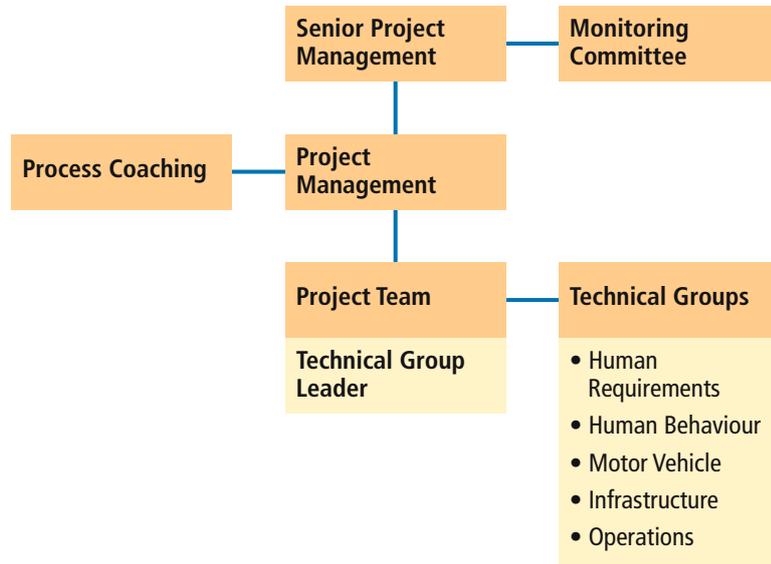


Fig. 2: VESIPO project organisation (for the names of the people involved, see Annex II)

Stages of work

Broad participation

Between January 2003 and September 2004, the VESIPO project involved around 80 people drawn from among professional organisations, associations, the cantonal and communal authorities and political and business circles. In addition, some 20 FEDRO staff members were part of the project organisation. In all, the VESIPO project consisted of five technical groups (Infrastructure, Operations, Motor Vehicle, Human Requirements, Human Behaviour), plus a monitoring committee to serve as a political sounding board for the senior project management.

The participatory process was divided into five stages:

- Stage I Problem identification, task setting
- Stage II Formulation of vision and targets
- Stage III Formation of strategy
- Stage IV Development of rating system
- Stage V Selection of measures

The participants worked through the stages one after the other, with the results of one stage being validated by senior project management before the next one was started.

2.4 Aim and purpose of the present report

Final report and action programme in one

Looking back, this report concludes the project phase of policy formulation and the participatory process described above. It is essentially based on the four summary reports of 2003/2004 containing the interim results from the five VESIPO stages.

Looking forward, the report represents the federal action programme to increase road safety in the next 15 years and thus the new road safety policy.

Head-on collision probably caused by driver nodding off

A head-on collision occurred on a straight stretch of road in good visibility and normal conditions. One of the drivers probably nodded off at the wheel. One person was killed and another seriously injured. Fatal accidents have occurred repeatedly at the same spot.

In 2003, momentary lapses resulted in:

- 17 fatal accidents
- 159 accidents with serious injuries



Via sicura measures intended to prevent accidents caused at accident black spots by drivers with impaired fitness to drive:

- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- elimination of accident black spots
- separation of traffic flows on country roads
- facilitated establishment of driving impairment

3 Objectives, action required and fields of action

3.1 Systematic development of the action programme

From aims and visions to a package of measures

The new federal road safety policy was developed using the methodological principles of strategic management. First, the system of objectives was defined in the light of the Federal Council instructions and the Vision Zero philosophy. What action was required and in what fields were then established. Finally, the strategic orientations and appropriate measures were laid down.

Aims	Action required	Fields of action	Guiding strategies	Measures
Specific situation to be achieved through conscious action	Difference between existing and desired situation (actual/target comparison)	The areas in which action is required	The instruments and levers needed to bring about the desired change and meet objectives	Individual activities defined in terms of content and time

Table 6: The strategic foundation of Via sicura

Measures in strategic combination

The broad framework and phased progression of Via sicura serve to ensure that all aspects of road safety are considered. Thus, the individual Via sicura measures share a common strategic foundation and are interconnected.

3.2 Via sicura's principal objective

Fewer than 300 deaths and 3,000 serious injuries by 2010

The principal objective of Via sicura is as follows: to reduce the annual number of traffic fatalities to under 300 and of seriously injured to under 3,000 by 2010. The number of deaths and serious injuries is to be reduced by at least 30 % in every subsequent ten-year period.

A yardstick for future progress

Halving the number of road deaths and serious injuries is an ambitious but achievable goal, with the focus on serious accidents. It also gives the Confederation's new road safety policy a quantifiable target and a timeframe.

3 Objectives, action required and fields of action

3.3 Via sicura's main and subsidiary objectives

The Via sicura action programme is based on a system of objectives drawn up in the light of the essential factors influencing road accidents. The principal objective has been broken down into five main and 14 subsidiary targets.

Factors influencing road accidents	Main objectives	Subsidiary objectives
Social awareness of the problem	1. Road safety is seen as being as important as mobility in society, politics and the economy.	1.1 The human, institutional, financial and structural conditions for meeting the objectives are met by the Confederation, the cantons and the communes. 1.2 Road users have a responsible attitude towards mobility and the need for maximum road safety is widely recognised.
Road user behaviour	2. Road users behave safely, considerably and responsibly.	2.1 Safety measures and regulations are accepted and generally complied with. 2.2 The number of deaths and serious injuries due to impaired driving drops substantially. 2.3 Only drivers who satisfy the physical and psychological requirements are allowed on the road. 2.4 Road users receive the best possible road traffic training.
Vehicle safety	3. All vehicles are safe to operate and drive.	3.1 All new vehicles are constructed and equipped with state-of-the-art accident prevention technology (active safety). 3.2 All new vehicles are constructed and equipped with state-of-the-art technology so as to minimise the number of serious injuries in the event of an accident (passive safety). 3.3 The vehicles on the road are safe to operate and drive.
Safety of the road infrastructure	4. Road infrastructure is designed, maintained and operated with safety in mind.	4.1 Safety deficits in the road transport infrastructure are eliminated, including particularly those affecting the most vulnerable and potentially at-risk road users. 4.2 An integrated accident management, traffic management and information system is established. 4.3 Construction and maintenance work is carried out to a high standard of safety.
Performance and quality of the rescue services	5. Accident victims are rescued quickly and professionally.	5.1 All parts of the rescue chain (emergency assistance, emergency calls, dispatch of rescue services to the scene, transport, emergency hospital care) are harmonised and have no weak points. 5.2 The treatment of accident victims is so good that the maximum numbers survive and suffer no lasting harm.

Table 7: The Via sicura system of objectives

3.4 The action required for road safety today

There are huge differences in respect of some of the above-mentioned factors and main objectives between the current situation and the goal. A comparison of the actual and target conditions reveals a multitude of shortcomings and gaps in the overall road safety system and serves to outline the action required for Via sicura. The weak points can be summed up as follows.

- Awareness**
- All too often, political, social and economic action pays scant attention to road safety. There is too little awareness of the high human toll of road accidents and of the resulting economic costs. Road safety concerns do not carry sufficient weight in the political balance.
 - The resources needed to improve road safety are not provided to the extent necessary and are not always deployed primarily on a cost-benefit basis. Moreover, suitable structures are lacking to permit the appropriate development and monitoring of a coherent federal road safety policy.
 - Insufficient funds are allocated for road safety research. Improvements need to be made in the quality of road accident statistics and the translation of new statistical and research results into road safety policy.
 - Road safety is not given sufficient importance in the training of road, transport and planning professionals.
- Road user behaviour**
- Despite the threat of heavy penalties, all too many road users regularly fail to respect the most important road traffic regulations. They do not pay sufficient attention to the traffic. Many of them are too ready to take risks and are either unaware of their dangerous behaviour or overestimate their own abilities.
 - The requirements with regard to fitness to drive are too low. There are too many dangerous, inconsiderate and irresponsible drivers on the roads. Too little use is made of the possibility of imposing driving bans on road users who are addicted to alcohol and other substances that impair a person's fitness to drive.
 - Too many road users do not know the traffic regulations well enough, partly because they do not have enough information and have received little training and further training. In addition, not everyone understands the complicated body of regulations and plethora of signs and signals, and some people are baffled by and hence do not accept them.

3 Objectives, action required and fields of action

- In general, not enough controls and checks are carried out to enforce the regulations. As many of the most serious violations of the rules remain unpunished, people tend to think they are doing nothing wrong.

Vehicle safety

- Not all vehicle safety requirements correspond to the current state of technology. The potential in respect of both active and passive safety is far from being exhausted. One particular deficiency is vehicle visibility (by day and by night).
- Hardly any of today's vehicles are equipped with devices that make them difficult to operate for people who are not in a fit state to drive or not wearing seat belts. Similarly, it is rare to find systems that provide drivers with support.

Motorway pile-up

Drivers were caught unawares by a wall of fog that suddenly cut visibility on the motorway. Around 60 vehicles piled into each other. In the tangled mass, cars were crushed by lorries. One person died and 90 were injured, 12 of them seriously.

In 2003, collisions caused in some cases by tailgating caused:

- 19 deaths
- 470 serious injuries



Via sicura measures intended to prevent collisions (caused, for example, by poor visibility):

- improved visibility for all vehicles
- provision of equipment to check safety distances
- awareness-raising campaigns
- mandatory use of lights during the day
- compulsory further training for motorcyclists and car drivers
- vehicle spotchecks based on safety criteria

Safety of the road infrastructure

- The road network suffers various shortcomings with regard to safety. There are no standardised road safety tests for road infrastructure projects, and the existing network has not been uniformly tested at accident black spots and danger points.
- The road network has not generally been designed in such a way as to prevent human error from having fatal consequences. In many places, there are still no safe and continuous paths for cyclists and pedestrians. Traffic separation needs to be improved. In residential areas, the potential for conflict remains too high because of differing speed limits.
- Above all in winter and especially with regard to bicycle and pedestrian paths, parts of the road network continue to be insufficiently maintained. In addition, maintenance, construction and emergency personnel are often at risk from other road users in the course of their work.

Rescue service performance and quality

- Too few road users are able to alert the rescue services properly and promptly. Rescue service personnel are not always as well trained as they should be.
- The rescue services sometimes take too long to reach the scene of an accident. Design improvements are still needed all the way along the rescue chain, from raising the alarm with a fast and accurate identification of the location of the accident to the network's emergency service density and an efficient rescue concept.

3.5 The Via sicura fields of action

Across-the-board action

The above presentation of the most serious gaps and shortcomings to be overcome to meet the objectives shows how much action Via sicura requires. Targeted activities are needed simultaneously in many different fields in order to meet the principal objective and make Switzerland's roads safer.

10 relevant fields of action

The integrated approach adopted by Via sicura comprises ten fields of action with the clear potential to bring about the desired improvement in road safety. Each field is of specific relevance to each of the five main Via sicura objectives, as demonstrated in the table below on the fields of action and their relevance in the system of objectives.

Main objectives Via sicura	Awareness: Road safety is seen as being as important as mobility in society, politics and the economy.	Responsible behaviour: Road users behave safely, considerately and responsibly.	Safe vehicles: All vehicles are safe to operate and drive.	Safe infrastructure: Road infrastructure is designed, maintained and operated with safety in mind.	Efficient rescue services: Accident victims are rescued quickly and professionally.
Fields of action					
1 Awareness raising and education					
2 Training and further training					
3 Regulations on conduct					
4 Control and sanction systems					
5 Motor vehicle					
6 Road infrastructure					
7 Quality assurance					
8 Research and statistics					
9 International cooperation					
10 Organisation and resources					

 highly relevant

Table 8: The 10 Via sicura fields of action and their relevance to the main objectives

Changing relevance of the fields

As time passes, the relative relevance of an individual field may change as a result of developments in the road transport or accident situation, of scientific and technological progress, or of socio-economic developments. The above model is thus not static but must constantly be adapted to changing circumstances. The strategic orientation of Via sicura also refers to the links between the ten fields.

4 Guiding strategies and measures

4.1 From action required to selecting measures (procedure)

Laying down the guiding strategies

The Via sicura measures were drawn up step by step (see section 3.1). On the basis of the action required, strategic guiding principles were formulated for each field of action in a participatory process. After a comparative evaluation, these now form the strategic framework of Via sicura and are referred to hereinafter as 'guiding strategies'.



Fig. 3: The process by which the Via sicura measures were selected

Development of ideas for measures

On the basis of these guiding strategies, the technical groups and the project management compiled a list of over 100 possible measures. The list did not include measures which after brief consideration were found to fall considerably short in terms of anticipated effectiveness, objective fulfilment, technical feasibility and prospects of political implementation.

Safety measures and basic measures

Via sicura contains measures of two kinds: safety measures, which have a direct and positive impact on road safety, and basic measures intended to establish the conditions and framework for the implementation of the safety measures but whose impact on accidents is purely indirect. They comprise predominantly organisational, financial and quality provisions.

4 Guiding strategies and measures

Establishment of a rating system

There was already a rating system to assess the safety measures and basic measures. Six more-detailed criteria were laid down for the safety measures and four for the basic measures. In addition, all of the people involved in the project were invited to make their own individual weighting proposal.

Criteria	Weighting
Potential effectiveness (in reducing the number of accident victims)	30%
Efficiency (cost/benefit ratio)	15%
Implementability (readiness for implementation, legislative requirement, etc.)	15%
Impact on personal freedom (scale of restriction)	15%
Protection for weaker road users and those involuntarily placed in danger	15%
Compatibility with goals in other fields of federal policy	10%

Table 9: Criteria (including weighting) for the assessment of safety measures

Similar criteria were used to rate the basic measures (weighting indicated in brackets): programme benefit (40 %), efficiency (20 %), implementability (20 %) and compatibility with goals in other fields of federal policy (20 %).

Description and assessment of measures

Using the rating system, all ideas for measures were described in detail in line with the criteria and assessed. They were ranked in relation to the individual criteria on a scale [see Annex I] of 1 (very bad) to 5 (very good). Safety measures whose potential effectiveness was low were eliminated. At the end of this stage, 52 safety measures and 28 basic measures were left.

Comparative rating of measures

These measures were then rated, each measure being classed between 1 and 5 (in accordance with the criteria and weighting). In Annex 1, the result for each Via sicura measure is shown in the 'Rating' column

Rating class	Usefulness
Rating class 5	Exceedingly useful
Rating class 4	Very useful
Rating class 3	Useful
Rating class 2	Fairly useful
Rating class 1	Of little use

Table 10: Rating scale

Selection of measures

The Via sicura action programme comprises measures whose rating indicates that they afford the greatest comparative benefit and measures which are likely overall to have the desired impact and lead to the requisite reduction in the number of deaths and serious injuries.

The potential effectiveness deemed necessary to achieve the objectives in 2010 and 2018 (see section 4.3) means that all measures rated 5, 4 and 3, with just one extremely costly exception, have to be incorporated into the action programme. In principle, measures rated 1 and 2 were not taken into consideration. The few exceptions have a high potential effectiveness, cannot be validly replaced by another measure, or underpin other measures.

Accident caused by drug driving

A driver skidded on a wet country road, the right side of his car crashing into the front of an oncoming vehicle that was being driven correctly. The driver of the oncoming vehicle was seriously injured. A urine test carried out on the driver at fault showed that he had consumed cannabis shortly before the accident.

- In 2003, drug driving caused:
- 12 fatal accidents
 - 84 accidents with serious injuries



Via sicura measures to prevent accidents caused by drug driving:

- retraining of first offenders
- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- police spotchecks that focus on safety
- increased traffic controls
- fast-track, standardised procedure for penalties

4 Guiding strategies and measures

Finally, the selection procedure also included special sensitivity analyses, consideration of mutual dependencies and an estimate of the financial implications of the whole package of measures (see section 5).

Via sicura outcome

The Via sicura action programme contains 56 measures which survived the above selection procedure and so represent a considerable degree of consolidation. The measures and the guiding strategies underlying them are presented briefly in the following section (for an overview, see Annex I). The financial and organisational provisions, as described in sections 5 and 6, are not included in the measures within the narrower meaning of Via sicura.

Car caught between two trams

Two cars driving illegally on the tram lines started to overtake a tram that was standing at a stop. The first driver just managed to avoid an oncoming tram. However, the second car, driven by a woman who was unfamiliar with the area, got caught between the two trams. Her child died in the accident.

In 2003, failure to traffic regulations resulted in:

- 13 fatal accidents
- 151 accidents with serious injuries



Via sicura measures intended to prevent accidents caused by failure to comply with the rules governing right of way:

- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers

4.2 Guiding strategies and measures in the individual fields of action

Field of 'Awareness-raising and education'

Object	The 'Awareness-raising and education' field comprises all efforts to raise the profile of road safety generally among the public and road users.
Guiding strategy	<p>The following strategic orientations apply to 'Awareness-raising and education':</p> <ul style="list-style-type: none">• Awareness of the risks of road transport and the consequences and costs of accidents must be raised in society, politics and the economy.• Road users must be continuously made aware of the need to recognise the dangers of road transport and to behave in a safe manner. In particular, they must be informed of the adverse effects of alcohol, drugs and medicines on fitness to drive.• Safety and mobility education must be part of the programme of instruction at all levels of education and training. It is necessary to promote the idea that it makes good sense to equip vehicles with safety equipment and to wear safety gear.• It is necessary to promote a responsible attitude towards mobility, as well as the idea that mobility and safety are equally important and not in conflict with each other.
Measures	<p>Via sicura provides for the following measures in the 'Awareness-raising and education' field:</p> <p>Awareness-raising campaigns (Measure 401) Targeted road safety campaigns will be conducted regularly on key safety issues. The campaigns will be accompanied by intensified police spotchecks.</p> <p>Instruction in mobility and safety at all levels of education (Measure 403) The cantons will promote road safety lessons in schools at all levels of education (from kindergarten to upper secondary level). The instruction will be given essentially by outside specialists (usually police traffic instructors). Appropriate modules will also be made available for schools beyond the compulsory education level.</p>

4 Guiding strategies and measures

Warnings on medicine packaging (Measure 405)

The fact that a medicine impairs fitness to drive will be indicated on the packaging (e.g. by means of a pictogram).

Obligation to warn when dispensing medicines (Measure 406)

Medical staff and chemists will be explicitly required to draw the attention of patients to the fact that a medicine or combination of medicines impairs fitness to drive.

Road safety charter (Measure 601)

Companies, firms, administrations and the like should be encouraged to sign a road safety charter. Through the charter, the organisation concerned declares itself in favour of principles and measures to increase road safety.

Road safety label (Measure 602)

A road safety label will be created for companies, firms, administrations and the like. The label attests to the particularly road-safety conscious behaviour of the organisation concerned and its members.

Comment 'Awareness-raising and education' will remain pillars of tomorrow's road safety policy. Social consciousness of the problem and responsible behaviour on the part of all road users cannot and must not be replaced simply by enhanced vehicle and road infrastructure safety.

Field of 'Training and further training'

Object	'Training and further training' focuses on road user behaviour, which is to be improved through targeted training and further training efforts. The training of professionals falls within the field of 'Quality Assurance'.
Guiding strategy	<p>The following strategic orientations apply to the field of 'Training and further training':</p> <ul style="list-style-type: none">• 'Training and further training' will serve to make drivers aware of the consequences of risky behaviour and to improve their traffic sense.• The level of driver education is to be improved through good training, appropriate further training courses and special retraining.
Measures	<p>Via sicura provides for the following measures in the field of 'Training and further training':</p> <p>Compulsory further training for car drivers and motorcyclists (Measure 504) All car drivers and motorcyclists must take a further training course before their driving licence expires.</p> <p>Retraining for motorists found driving under the influence of alcohol or drugs (Measure 505) Any motorist found driving under the influence of alcohol or drugs will be required to undergo retraining, even for a first offence.</p> <p>Systematic retraining for repeat offenders (Measure 506) Anyone who is disqualified from driving for at least six months will be required to undergo retraining.</p>
Comment	By international comparison, Switzerland has a high standard of training and this will be further improved with the introduction of two-phase training from 2005. The principle of life-long learning must also apply to road traffic.

4 Guiding strategies and measures

Field of 'Regulations on conduct'

Object	The 'Regulations on conduct' field is concerned primarily with preventive measures designed to influence the behaviour of selected target groups in a way favourable to road safety.
Guiding strategy	<p>The following strategic orientations apply to the field of 'Regulations on conduct':</p> <ul style="list-style-type: none">• If awareness-raising, education and training are insufficient to bring about the necessary changes in road user behaviour, and as a last resort, drivers must be obliged to behave a certain way by means of regulations governing their conduct.• In principle, resolute implementation of existing regulations is to be preferred to the adoption of new regulations.• Stricter standards of behaviour will be set for groups of road users characterised as having a special risk affinity or responsibility in road transport.
Measures	<p>Via sicura provides for the following measures in the field of 'Regulations on conduct':</p> <p>Increasing the percentage of cyclists wearing helmets (Measure 407) The wearing of a helmet when cycling will be strongly promoted through incentives and awareness-raising. If persuasion fails to induce a majority of cyclists to wear a helmet, compulsory measures will be introduced.</p> <p>Mandatory use of lights during the day (Measure 408) Vehicles must be driven with their lights on at all times, day and night. If the lights do not come on automatically, the driver will be required to switch them on.</p> <p>Alcohol ban for new drivers (Measure 517) New drivers will be required to remain alcohol-free while driving during their probationary period.</p> <p>Alcohol ban for professional drivers (Measure 508) All professional drivers will be required to remain alcohol-free during working and driving hours.</p>

Comment The measures are confined to particularly dangerous or at-risk target groups or serve to ensure the consistent implementation of a standard which already enjoys widespread acceptance on a voluntary basis (such as the use of lights during the day). There will be no general reduction in speed limits (120, 80 and 50 km/h); instead, the existing limits will be strictly enforced.

Collision caused by a driver using a mobile phone

A driver was using his mobile phone while driving at high speed on the motorway. He ran into a car in front, the two occupants of which died as a result of the accident.

In 2003, drivers distracted while using their mobile phones caused:

- 2 fatal accidents
- 7 accidents with serious injuries

Given that many more cases go unreported, the number of accidents caused by drivers distracted by electronic means of communication is probably much higher.



Via sicura measures intended to prevent accidents caused by drivers distracted while using electronic means of communication:

- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- police spotchecks that focus on safety
- increased traffic controls

4 Guiding strategies and measures

Field of 'Control and sanction systems'

Object	The 'Control and sanction systems' field contains strategies and measures to improve the enforcement of existing regulations in the interest of road safety. This includes simpler means of checking the fitness and ability of road users to drive, and an appropriate organisational framework for efficient control and prosecution.
Guiding strategy	<p>The following strategic orientations apply to the 'Control and sanction systems' field:</p> <ul style="list-style-type: none">• Traffic controls are to be conducted and intensified predominantly in relation to danger spots and types of offences which accident statistics show to be of greatest relevance to road safety.• Stricter controls and sanctions will be applied, for instance, to failure to comply with speed limits and safety distances, as well as to activities that distract the driver's attention (e.g. using a mobile phone without a hands-free facility).• Drivers who are incorrigibly prone to risky behaviour or who are unfit to drive because of their dependence on alcohol, drugs or medication must be kept off the road.• Sanctions must be so designed that they fulfil their preventive and educational purposes.
Measures	<p>Via sicura provides for the following measures in the 'Control and sanction systems' field:</p> <p>Police spotchecks that focus on safety (Measure 411) The police will focus their traffic spotchecks (including technical aids) on safety-related errors and danger spots, and will combine them with information campaigns.</p> <p>Increased traffic controls (Measure 412) Mobile and stationary traffic controls (including telematics applications) will be increased and cross-sectional speed controls will be supplemented with segment average speed controls.</p> <p>Fast-track and standardised sanctions procedures (Measure 413) Criminal and administrative procedures will be fast-tracked and coordinated in such a way that traffic offences can be sanctioned on the spot. The application of the law is to be standardised throughout Switzerland.</p> <p>Equipment to check safety distances (Measure 416) The safety distance should be checked more frequently. To this end, the police should be provided with equipment enabling them to check safety distances cost-effectively and reliably.</p>

Coordination of police controls (Measure 423)

A national plan for road safety enforcement measures will be drawn up and implemented. Activities will be coordinated between cantons and countries, as recommended by the European Commission.

Standardisation of requirements for fitness to drive (Measure 509)

The minimum physical and psychological requirements for drivers will be brought up to present day standards. For the first time, the necessary cognitive and character requirements will be given legal definition.

Periodical check of fitness to drive (Measure 510)

Driving licences should be subject to a time limit. The validity of the licence should be extended only if the holder can prove continued fitness to drive by means of an eye test and self-declaration or control examination.

Aids to determine incapacity to drive (Measure 512)

Police check points should be provided with suitable equipment to determine incapacity to drive on the spot, irrespective of the grounds for incapacity.

100 % reliable breath tests (Measure 513)

Drunkenness should be deemed proven if the result of a breath test reaches or exceeds a given breath alcohol concentration.

Comment

The intensification of road checks and the optimisation of driving licences and sanctions constitute crucial components of Via sicura. This requires the cooperation of the cantons and communes responsible for carrying out the checks, as well as effective instruments that enable the Confederation to provide incentives and guidance (see sections 5 and 6).

4 Guiding strategies and measures

Field of 'Motor vehicle'

Object	This field of action covers all of the efforts made to reduce the risk of traffic accidents by technical means on the vehicle and to increase the safety of the occupants and other road users.
Guiding strategy	<p>The following strategic orientations apply to the further development of vehicle technology for safety purposes:</p> <ul style="list-style-type: none">• All motor vehicles should be fitted with the optimum active and passive safety equipment, and with driver-support systems, in application of the relevant international regulations and standards and without creating technical barriers to trade.• The safety systems newly developed by the automobile industry should progressively be made the general norm. Tuning and modifications must not adversely affect a vehicle's safety standard.• All vehicles on the road must be clearly visible to other road users at all times.• The use of the vehicle's controls and driver assistance systems must not distract the driver's attention from the road.
Measures	<p>Via sicura provides for the following measures in the 'Motor vehicle' field of action:</p> <p>Restriction on wheel modifications (Measure 205) Restrictions will be imposed on wheel modifications. From now on, only the tyre and wheel dimensions approved by the manufacturer will be permissible.</p> <p>Universal reprovement of vehicle visibility (Measure 209) The regulations concerning the lights and visibility of new vehicles will be improved in order to reduce the danger of collisions.</p> <p>Tracing emergency calls from mobile phones (Measure 114) The method of tracing emergency calls from mobile phones must be automated so that the location of the accident can be identified more quickly.</p>

Comment There is still enormous potential for increasing road safety through vehicle technology, particularly in the long term in combination with telematics (electronic vehicle guidance). As Switzerland does not have its own automobile industry, it is heavily dependent on international cooperation and does not wish to create new technical barriers to trade by going its own way. This is why international commitment (see Measure 211 under 'International cooperation') is just as vital in respect of vehicle safety as the implementation of the above measures. For its part, the possibility of creating a system of incentives for vehicle safety requires intensive testing and coordination.

Motorcyclist skids into crash barrier

A motorcyclist skidded on a left-hand bend and was thrown against one of the posts in the crash barrier. The crash was caused by a patch of oil on the newly resurfaced stretch of road. The motorcyclist was seriously injured and permanently paralysed from the waist down.

In 2003, collisions between motorcycles and traffic islands or crash barriers caused:

- 12 fatal accidents
- 86 accidents with serious injuries



Via sicura measure intended to prevent accidents in which motorcyclists collide with traffic islands or crash barriers:

→ elimination of potential danger spots, crash barriers with special under-run protection

4 Guiding strategies and measures

Field of 'Road infrastructure'

Object	This field of action covers all aspects of the design, operation and maintenance of the road infrastructure (with the exception of the rescue services), as well as the corresponding efforts to bring about an infrastructure that is both safe and high quality.
Guiding strategy	<p>The following strategic orientations apply to the 'Road infrastructure' field.</p> <ul style="list-style-type: none">• Accident black spots and danger spots must be routinely identified and eliminated over the whole existing road network, including foot-paths and cycle paths.• The infrastructure must be forgiving and easy to follow for road users. It must also comply with the existing system of speed limits.• Wherever necessary and feasible, motorised and non-motorised traffic must be kept separate.• On roads in residential areas, speeds must be adjusted accordingly and traffic calming measures maximised with the cooperation of the stakeholder population.• Improved norms and safety standards must be laid down for traffic management in relation to work sites.
Measures	<p>Via sicura provides for the following measures in the field of 'Road infrastructure':</p> <p>Eliminating accident black spots (Measure 303) Accident black spots on cantonal and communal roads will gradually be eliminated.</p> <p>Eliminating potential danger spots (Measure 302) Potential danger spots on cantonal and communal roads will gradually be eliminated.</p> <p>Standardisation of speed limits (Measure 107) The speed limits on all types of roads must be laid down in accordance with standardised criteria throughout Switzerland.</p> <p>Separation of traffic flows on country roads (Measure 309) On busy and potentially dangerous roads outside towns, traffic moving in opposite directions will be separated (e.g. by safety barriers) unless there are compelling reasons not to do so.</p>

Traffic separation and coexistence solutions (Measure 305)

Specific traffic separation measures (generally outside town) and coexistence solutions (generally in town) will be tested and implemented.

Traffic calming measures (Measure 306)

Zones with traffic calming measures (pedestrian precincts, 30 km/h speed limit, etc.) will be demarcated in residential areas.

Optimisation of traffic management and visibility at roadwork sites (Measure 104)

Roadwork sites and contractors' vehicles on the roads must be designed and marked for greater visibility. The foundations must be established for planning and implementing clear, safe and standardised traffic management.

Traffic warning equipment at roadwork sites (Measure 106)

Where short-term building and maintenance works are being carried out on high capacity roads with no physical separation from traffic, optical or acoustic warning equipment must be installed to warn of vehicles entering the safety zone.

Comment Some of the above measures are based on other measures from the 'Research and statistics' and 'Quality assurance' fields (e.g. measures 301, 312, 313, 116). Infrastructure improvements along the lines spelled out in those measures are a cost-intensive but very effective and well-accepted means of increasing road safety, particularly for the protection of weaker road users. As the cantons and communes are largely responsible for road infrastructure, the Confederation will need to offer effective incentive and control instruments for the implementation of these measures (see sections 5 and 6).

4 Guiding strategies and measures

Field of 'Quality assurance'

Object	'Quality assurance' is an ongoing task at virtually all levels of road safety policy. It involves in particular the training, further training and networking of professionals, especially the rescue services, the development of special analysis and monitoring instruments and the establishment of quality standards.
Guiding strategy	<p>The following strategic orientations apply to the 'Quality assurance' field:</p> <ul style="list-style-type: none">• The road safety regulations need to be overhauled. Complicated rules must be simplified and unnecessary ones discarded.• The training of road transport professionals (transport/spatial planning, civil engineering, police, justice, etc.) in relation to road safety matters must be improved.• The organisation and training of the rescue services need to be optimised. The rescue services must have sufficient numbers of qualified personnel.• Road safety assessments must be introduced in a coordinated manner for new and existing infrastructures.
Measures	<p>Via sicura seeks to make progress in 'Quality assurance' through the following measures:</p> <p>Engineering training for road safety professionals (Measure 311) Training courses will be developed, such as road safety in road infrastructure and in the operation of transport systems.</p> <p>Quality assurance for the accident and emergency services (Measure 199) Education and training for accident and emergency personnel will be extended and quality assurance will be institutionalised for ambulance call centres and the rescue services.</p> <p>Psychological assistance (Measure 124) Where a gap exists, care organisations will be established to provide road users and the emergency services with psychological or psychiatric assistance in coping with the experience of major accidents and other traumatic incidents.</p> <p>Road Safety Audit (Measure 312) Standardised methods will be developed and made mandatory for the assessment of safety deficits in road building projects.</p>

Additions to the SARR/Swiss Lighting Association technical standards (Measure 313)

Civil engineering standards will be optimised from the point of view of road safety.

Guidelines for safe operation and maintenance of road infrastructure (Measure 116)

Safety guidelines will be drawn up and implemented for the operation and maintenance of road infrastructure and equipment.

Road safety scrutiny of federal projects (Measure 604)

All major federal projects in the field of road transport must be scrutinised for compatibility with road safety.

Drafting of traffic regulations (Measure 419)

Road traffic law must be so drafted that the regulations are clear, comprehensible and easy to implement and that they satisfy the needs of both road safety and the law.

Head-on collision caused by a drink driver

A driver under the influence of alcohol found himself on the wrong side of the road while driving at night on a long straight stretch. He collided with a car being driven correctly in the opposite direction, killing the driver and seriously injuring her passenger.

In 2003, drink driving caused:

- 77 fatal accidents
- 597 accidents with serious injuries



A number of measures against drink driving (for example the reduction of the blood alcohol concentration level to 0.5 pro mille) were introduced before Via sicura. Additional measures include:

- 100% reliable breath tests
- alcohol ban for new drivers
- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- retraining for drink-driving first offenders

4 Guiding strategies and measures

Introduction of quality management for driving tests (Measure 503)

Every driving test authority will in future be required to have a certified quality management system for driving tests.

Quality assurance in ascertaining fitness to drive (Measure 514)

Further guidelines and recording instruments will be developed and implemented to determine fitness to drive. Examining medical and traffic psychology specialists will receive appropriate training and regular further training.

Comment Measures containing quality assurance elements in the narrow sense are also to be found in other Via sicura fields of action. This applies particularly to the next field of action, 'Research and statistics'. Ensuring and developing the methodological and technical competences of professionals and determining performance standards are of great importance for the long term success of Via sicura.

Cyclist injures herself

A schoolgirl on a bicycle was startled on a bend by an oncoming car that was being driven correctly. She braked so hard that she fell off her bike and suffered serious injury. She was not wearing a helmet at the time.

In 2003, cyclists were involved in:

- 48 fatal accidents
- 902 accidents with serious injuries



Via sicura measures intended to prevent cycling accidents:

- increasing the percentage of cyclists wearing helmets
- traffic separation and coexistence solution
- traffic calming
- instruction in mobility and safety at all levels of education

Field of 'Research and statistics'

- Object** This field is concerned with the main approaches and efforts to put research and statistics increasingly at the service of road safety, as well as to reduce the lag between obtaining and implementing knowledge.
- Guiding strategy** The following strategic orientations apply to the 'Research and statistics' field:
- The gathering and preparation of accident and other road safety related data is to be more closely focused on the requirements for accident prevention.
 - The results of research and accident data analyses are to be translated directly into accident prevention measures.
 - In the field of road transport, priority will be given to research and pilot projects the results of which contribute to increasing road safety.
 - Switzerland will pursue research and development in transport telematics and exploit its potential for the benefit of road safety.
- Measures** Via sicura provides for the following measures in the 'Research and statistics' field:
- Improvement of accident statistics (Measure 608)**
Accident statistics will be optimised in relation to the accidents recorded, the quality of the data recorded, the possibility of cross-referencing the accident data with additional characteristics from other records, and the analysis of the data.
- Research into the cause of accidents (Measure 621)**
Accidents (e.g. major incidents, roadwork accidents) will be systematically analysed and assessed in terms of road behaviour, constructional, technical and organisational measures and the response of the rescue services.
- Exchange of accident data (Measure 607)**
The insurance companies will make their accident data available for research and prevention purposes. The Confederation will promote the exchange of data and ensure its protection.
- Analysis of accident black spots and danger spots (Measure 301)**
Accident black spots (conspicuous accident characteristics) and accident danger spots (conflict analysis) will be identified and analysed for Switzerland as a whole.

4 Guiding strategies and measures

Strengthening of road safety interests in research (Measure 606)

More research should be conducted on road safety and it should be more targeted. Higher priority should be given to research into new or unexplored aspects of road safety.

Development of a road safety research database (Measure 605)

Information and findings of road safety research (national and international) are to be recorded in a database and prepared for user-friendly exploitation so that gaps in research can be identified earlier and so that research work can be networked.

Promotion of pilot projects (Measure 210)

The Confederation will promote and support pilot projects which could produce significant results and serve to generate further road safety activities (e.g. in the field of telematics).

Comment The higher the level of road safety, the more further progress will require accurate information on accidents and their causes and the exploration of hitherto untapped safety potentials. 'Statistics and research' are not an end in themselves but rather the requisite basis for an effective road safety policy. In this regard, it is of the utmost importance to translate knowledge into specific action and to evaluate the consequences.

Head-on collision caused by speeding

A large car swerved onto the wrong side of the road and collided with a small car which was hurled into the adjacent woods. The passenger in the small car died before he could be rescued.

In 2003, speeding caused:

- 163 fatal accidents
- 1,075 accidents with serious injuries



Via sicura measures intended to prevent speeding accidents:

- traffic-calming measures
- police spotchecks that focus on safety
- increased traffic controls
- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers

Field of 'International cooperation'

Object	This field covers the efforts to improve road safety through crossborder cooperation and international standardisation, as well the exchange of experiences with other states and international organisations.
Guiding strategy	<p>Switzerland is to strengthen its commitment at the international level so as to ensure that</p> <ul style="list-style-type: none">• the international standards relevant to vehicle safety are constantly adjusted to the current state of the art• the standards for the road infrastructure and the highway code are internationally harmonised, and• crossborder cooperation is maintained between traffic police forces.
Measures	<p>Via sicura provides for the following measures in the field of 'International cooperation':</p> <p>Enhanced international contacts (Measure 212) Bilateral and multilateral contacts at the political level (EU, CEMT, OECD, etc.) in connection with road safety issues will be intensified and the existing network of contacts will be developed.</p> <p>Development of the international commitment to vehicle safety (Measure 211) Switzerland will join in UNECE working groups and other international bodies concerned with vehicle safety and will work actively to improve the general safety standards applied in vehicle technology.</p> <p>Commitment to crossborder prosecutions (Measure 422) Switzerland will work actively at the international level for a simple and efficient system for crossborder prosecution of offences.</p>
Comment	Though contacts already exist at the international level, they must be intensified and more closely coordinated. However, Switzerland's capacity for exerting influence at the international level (e.g. in the EU) should not be overestimated. There is a lot of catching up to do, particularly in terms of motor vehicles, where further safety precautions are scarcely conceivable without standardisation at the international level.

4 Guiding strategies and measures

Field of 'Organisation and resources'

Object	This field covers the specific organisational and resource-oriented arrangements that play a central role in the implementation of Via sicura.
Guiding strategy	<p>The following strategic orientations apply:</p> <ul style="list-style-type: none">• Appropriate solution-oriented structures must be used or established for the coordinated implementation of the road safety policy at federal, cantonal and communal level.• The financial resources needed for road safety purposes must be made available and used at federal, cantonal and communal level.• The resources needed for the implementation of the measures will be procured primarily in accordance with the principle of causal responsibility and their use will be tied.• The use of the existing resources will be checked and optimised for effectiveness in relation to the reduction of road transport risks.
Measures	<p>In the 'Organisation and resources' field, the following measures figure large:</p> <p>Management of road safety policy (Measure 611) The Confederation will manage, coordinate and oversee the implementation of road safety policy and will provide for the necessary organisational requirements.</p> <p>Formation of a National Road Safety Committee (Measure 609) The Confederation will assume an active role in coordination and cooperation. A National Road Safety Committee will be set up to monitor the implementation of Via sicura.</p> <p>Using resources as efficiently as possible (Measure 616) The award of public funds for road safety will be systematically examined for cost-effectiveness and correspondingly optimised.</p>
Comment	The measures contained in the 'Organisation and resources' field have a direct bearing on the financing of Via sicura (see section 5) and the implementation of the action programme (see section 6).

4.3 Assessing the effectiveness of the planned measures

Starting point The principal objective of the new road safety policy is to reduce the annual number of traffic fatalities to under 300 and of seriously injured to under 3,000 by 2010. The number of deaths and serious injuries is to be reduced by at least 30 % in every subsequent ten-year period (see section 3.2).

A more positive trend A subsidiary study entitled 'Forecast for road accidents 2010' (Prognose der Strassenverkehrsunfälle 2010, bfu, 2001), part of the project preparatory work, found that there has been a downward trend in serious accidents since 1970. The forecast for further changes in accident figures is therefore positive.

According to the study, if the efforts exerted in favour of road safety thus far are continued over the coming years at all levels (state, associations, private sector), we can look forward to a further reduction in the number of deaths and serious injuries on the road. For the year 2010, the study forecast a reduction in the number of deaths from 600 to around 400 and in the number of serious injuries from 6,000 to 4,000, provided that there are no marked changes in the main factors affecting the figures.

Questions What state activities may be taken to form more or less part of this positive trend? How great will be the impact after 2005 of the measures which had already been taken before Via sicura was launched? What further reduction can the Via sicura action programme be expected to bring about by 2010 and 2020?

In future, road safety activities will increasingly fall within the framework of the implementation of Via sicura. The potential effect of this action programme is shown separately (see Table 12, p. 47) and it would be incorrect for the reduction in the number of road accident victims expected in accordance with the forecast to be incorporated repeatedly in an efficiency model.

Factors that influence accident figures

The number of traffic accidents depends not only on the level of state intervention but also on many external factors, such as population growth, traffic volume and economic development, advances in automotive technology, medical progress and so on. In addition, in the past few years, i.e. before the advent of Via sicura, numerous measures have been introduced that will have a positive impact on road safety in the future.

Thus, Via sicura is based on the assumption that, as far as effect is concerned, the broad action programme will absorb around half of the above-mentioned trend. This means that by 2010, there will be a reduction of 100 in the number of deaths and 1 000 in the number of serious injuries attributable to the influence of external factors. With effect from 2010, the contribution of this positive trend is treated as constant, since it is hardly feasible to make any more reliable forecast at the present time.

4 Guiding strategies and measures

The number of serious injuries may be expected to follow more or less the same trend as the number of road deaths. Given the high statistical correlation, it may be assumed that the ratio of deaths to serious injuries will be constant at 1:10.

Target effect for new measures

Thus, the following 'target effect' applies to Via sicura: by 2010, the new measures must permit the avoidance of at least 200 deaths and 2,000 serious injuries and, by 2020, at least 290 deaths and 2,900 serious injuries. The reference year for all estimates is 2000, a period during which there were 600 deaths and 6,000 serious injuries on the road.

Year	Target		Reduction target		Contribution of external factors (Trend)		Via sicura target effect	
	Deaths	Ser.Inj.	Deaths	Ser.Inj.	Deaths	Ser.Inj.	Deaths	Ser.Inj.
2000	approx. 600	approx. 6000						
	Reference year							
2010	max. 300	max. 3000	min. 300	min. 3000	approx. 100	approx. 1000	approx. 200	approx. 2000
2020	max. 210	max. 2100	min. 390	min. 3900	approx. 100	approx. 1000	approx. 290	approx. 2900

Table 11: Target effect for the Via sicura action programme

Forecast effect for the individual measures

In the detailed descriptions of the Via sicura measures, the potential effect is indicated as a forecast of the expected reduction in deaths and serious injuries 15 years after the initiation of the measure. The earliest possible time for the initiation of the measure and the time for the production of a significant effect are also indicated (see Annex I). In this context, the effect is deemed to be 'significant' where a measure produces more than a third of its estimated potential effect. Hence, with reference to the target years (see Table 12), in estimating the effect of the overall package of measures, only 60 % of the estimated potential effect of a measure was taken into account.

Overall forecast for Via sicura

Thus, on the basis of the measures described and the stated methodological assumptions, the Via sicura action programme should produce the following effects (the values indicated below referring to the forecast reduction in the number of persons killed):

Target year	Target effect for Via sicura	Anticipated effect of Via sicura (+ RTA)
2010	approx. 200	approx. 120 + 35*
2012	approx. 220	approx. 250
2015	approx. 270	approx. 270
2020	approx. 290	approx. 300

* Including the effect of the measures within the framework of the latest revision of the Road Traffic Act (RTA)

Table 12: Anticipated effect of the Via sicura measures (Reduction in the number of fatalities)

Special case – revision of the Road Traffic Act

Though the revised version of the Road Traffic Act due to come into force in 2005 (see section 1.3) does not formally belong to Via sicura, it will soon produce a considerable effect. The potential effect of all the measures by 2010 is estimated at 70 deaths avoided and 700 serious injuries. This special circumstance is taken into account in the anticipated effect shown above, half of the effect of the comprehensive revision of the law being added to that of Via sicura (the other half of the effect is contained in the normal course of the positive trend).

Target achievement by 2010 doubtful

It will only just be possible to meet the target by 2010 (see Table 12). Few measures which can both be quickly initiated and have an immediate, noticeable impact. What is more, they all have to be implemented as planned and in the shortest possible time.

The prerequisite for achieving the target is for all concerned in the implementation of Via sicura to show the necessary commitment and for the relevant resources to be made available quickly and on the required scale.

Towards accurate forecasts

It is very difficult to predict how effective any road safety measure will in fact be and only plausible orders of magnitude can therefore be given. It may nevertheless be assumed that within the next ten years the measures to be taken will lead to the sharp fall in the number of road accident victims quantified in the targets.

5 Financial, legal and other consequences of Via sicura

5.1 Costs and benefits of Via sicura

Average cost per annum

Over the next 15 years, the implementation of Via sicura will cost an average of CHF 670 million per annum. The main cost factors are as follows:

- Road infrastructure (approx. CHF 240 million per year): Considerable additional costs are associated with the elimination of potential danger spots and accident black spots and the increased separation of traffic flows on country roads.
- Control and sanction systems (approx. CHF 220 million per year): Additional costs will arise particularly for traffic controls, which are to be increased in number and focused on offences most relevant to road safety.
- Vehicles (approx. CHF 100 million per year): The main element is the package of measures entitled "Improving visibility", which adds one-off costs to the purchase of a vehicle (an average of CHF 250 per vehicle).

A further CHF 110 million is distributed among measures in other areas.

Allocation of costs

Around two thirds of the costs will be borne by the public purse (Confederation, cantons, communes and Road Safety Fund) and one third by private individuals.

Direct costs for private individuals

The direct costs for private individuals are essentially higher vehicle prices. Cyclists will have to bear an additional cost of CHF 20 per bicycle for better lights.

The financial burden for other vehicle owners is relatively small. For private cars, the one-off additional costs amount to CHF 250, which represents less than 1% of the average purchase price of a car.

In the case of heavy vehicles, the costs run to around CHF 550 (0.2% of the average purchase price). Mandatory use of lights at all times will raise the costs for fuel and wear and tear on the lighting system by an average of 20 centimes per 100 km.

Additional expense and charges

Further costs arise in the form of additional expenses/charges for which all drivers are liable (e.g. compulsory further training) or in the form of fines and charges which are levied only on the offender (e.g. fines for illegal behaviour, retraining charges for alcohol and drug first offenders, or retraining charges for repeat offenders).

Public disbursement Under the existing allocation of spheres of competence, the implementation of Via sicura will cost the public purse on average

- for the Confederation, around CHF 11 million per year
- for the cantons and communes, around CHF 448 million per year
- for the Road Safety Fund, around CHF 3 million per year

The main expenses of the Confederation, the cantons and the communes arise from the adaptation of the road infrastructure and from the higher requirements for operation and maintenance of the road network.

For the cantons and communes, the additional costs of increasing the number of traffic controls have to be taken into account. This may be partly offset by additional income from fines, although that is not the intended object of the measure. The additional costs of the Road Safety Fund arise from increased activity in its traditional sphere of educational measures.

Uncovered costs: Taking into consideration the expected revenue from charges and fines, it may be assumed that, over and above the costs stated above, the public purse will have to bear uncovered costs of around CHF 300 million for Via sicura.
CHF 300 million p.a.

Economic benefits The economic benefits of Via sicura will appear in future in the form of accident costs avoided. Accident costs consist of expenses for personal injury and property damage, as well as police and prosecution costs. In the case of personal damage, a distinction is drawn between tangible and intangible costs. The economic benefits of Via sicura may be estimated (see Table 13, p. 50) on the basis of the programme's anticipated potential effect (see Table 12, p. 47).

Cost/benefit comparison If we compare the benefit arising through effectively avoided payments (about CHF 840 million per year) with the costs (about CHF 670 million per year), it is clear that the former exceeds the latter. Indeed, depending on the capitalisation of intangible damage, the benefit may be several times greater. Thus, the speedy implementation of Via sicura makes economic sense. Even at the individual level, the majority of road users can expect the direct economic benefits (through lower insurance premiums and smaller outlays) to outweigh the expected individual additional costs of financing the measures.

5 Financial, legal and other consequences of Via sicura

Average savings in annual accident costs (= benefit)				
	Potential effect of the Via sicura measures		Average accident costs avoided per annum	
	Potential effect in Year	Ø over 15 years	on basis of effective payments	tangible and intangible costs
Reduction in number of deaths	2010: 120 pers. 2012: 250 pers. 2015: 270 pers. 2019: 290 pers.	approx. 182 persons	approx. CHF 215 million p.a	approx. CHF 715 million p.a
Reduction in number of serious injuries	2010: 1,200 pers. 2012: 2,500 pers. 2015: 2,700 pers. 2019: 2,900 pers.	approx. 1,817 persons	approx. CHF 625 million p.a	approx. CHF 1765 million p.a
Reduction in minor injuries: not taken into account				
Reduction in accidents with only material damage: not taken into account				
Total			approx. CHF 840 million p.a.	approx. CHF 2,480 million p.a.

Table 13: Economic benefits of Via sicura (undiscounted, at 2004 prices)

5.2 Financing not covered costs by the public purse

Possible sources of financing

Various new sources were examined and evaluated to finance the costs not covered by the public purse. They include:

- the use of funds generated from mineral oil tax,
- financing through the earmarking of receipts from fines
- financing through a supplement on compulsory third-party motor insurance premium

Mineral oil tax

The use of funds from mineral oil tax to assist with the financing of Via sicura has been ruled out for various reasons. Although the tax is levied on transport, the extent to which the burden is applied on a risk basis is limited. In addition, this approach would result in a higher level of legislative requirement (amendment of the constitution) and corresponding delays in financing being made available.

Earmarking of receipts from fines

The earmarking of receipts from fines is also not being pursued as a financing option. It would be contrary to the very basis of the NFA (new system of financial equalisation and allocation of tasks between the Confederation and the cantons) if the cantons were required by federal law to earmark the receipts from fines imposed for traffic offences to road safety purposes.

Supplement on compulsory third party insurance

An increased charge on the compulsory third party liability insurance for motor vehicles is a very effective means of raising funds. Moreover, motorists are already paying a supplement of 0.75 % on their compulsory third party insurance, which is tied to awareness-raising and educational activities.

Insured as beneficiary

The greater part of accident damage is paid by the motor vehicle insurers. When their pay-outs increase, they in turn increase their premiums to the insured. If the Via sicura measures have the intended effect, the insurers will incur significantly lower costs and this will eventually filter through to the insured. Thus, the insured will benefit directly from the planned measures through probable lower premiums (or lower increases in premiums).

Given the competitive position in the insurance market, the insurers are interested in making attractive offers and the savings on accident costs can be passed on to the insured in the form of lower premiums. Thus, as the monetary benefit goes mainly to the insured, it is only fair that they should also assume the costs.

Groups exempted from the supplement

Non-motorised road users such as pedestrians and cyclists will not have to pay under this system. As far as pedestrians are concerned, the exemption is justified in that this category of road users covers virtually the whole population and that pedestrians are hardly ever responsible for serious accidents. As far as cyclists are concerned, a similar supplement on cycle insurance is conceivable but would hardly be worthwhile, given the low premiums.

Financing by way of charging a supplement on third party motor insurance has another important advantage. In setting premiums, the insurers strike a close balance between risk and responsibility, placing special emphasis on the claims record. Thus, people who go for years without a claim receive a discount, whereas others who have caused damage are required to pay a supplement. As the charge comes in the form of a percentage supplement on the premium thus calculated, the amount drivers have to pay closely reflects the balance of risk and responsibility. This creates another incentive to drive with care and prudence.

The amount of the supplement remains to be set. In order to cover the costs to the public purse of around CHF 300 million per year, the charge will need to be around 15 % of the net total premium during the first fifteen years of the implementation of Via sicura. After the close of the cost-intensive phase of infrastructure measures (see 5.1), the charge will probably be reduced substantially.

Return on investment

During the first 15 years, drivers – depending on the model of vehicle – will pay between CHF 60 and 70 per year.

However, this additional cost has to be set against probable direct savings on their third party liability premiums – or at least smaller increases in premiums – so that, in the longer term, they will be no worse off and will enjoy safer roads into the bargain.

5 Financial, legal and other consequences of Via sicura

5.3 Legislative amendments required

Legislative amendments required

Via sicura comprises a whole series of measures which require changes to the legal status quo. Though no change is envisaged in the constitution, various laws, including particularly the Road Traffic Act, will need to be amended. In addition, various ordinances and instructions will have to be supplemented or amended.

Overhaul of traffic regulations

Furthermore, Measure 419 (Drafting of traffic regulations) provides that road traffic law must be so drafted that the regulations are clear, comprehensible and easy to implement. It is not so much a question of altering the material content of the applicable regulations, but rather of ensuring that their form, structure and organisation are appropriate for the persons for whom they are intended. This measure requires a more or less complete overhaul in terms of laws, ordinances and instructions.

5.4 Relationship to international law

International treaties

Various international treaties relate to road transport. The most important of these are:

- the Convention of 8 November 1968 on road traffic with trailers (SR 0.741.10),
- the Convention of 8 November 1968 on road signs and signals (SR 0.741.20) and
- the European Agreements of 1 May 1971 supplementing the Convention of 8 November 1968 (SR 0.741.101, respectively 0.741.201).

The Via sicura measures do not conflict with international regulations but in some cases supplement them. They are compatible with European agreements. In particular, the measures are not in conflict with the bilateral treaties concluded by Switzerland with the European Community, nor do they not create any technical barriers to trade.

Given the high level of international participation in Swiss road traffic, Switzerland is interested in an international harmonisation of the regulations. The 'International cooperation' field of action therefore contains measures intended to further strengthen relations abroad and to ensure that the measures to promote road safety are firmly based on international law.

Technical regulations: restricted autonomy

The technical regulations for motor vehicles are today largely governed by the directives of the European Community and the regulations of the United Nations Economic Commission for Europe (UNECE). Within the framework of these various treaties, Switzerland has undertaken to recognise and implement these directives and regulations. Otherwise, however, Switzerland retains extensive freedom to lay down its own regulations for road traffic.

5.5 Effects on society, the economy and the environment

Sustainable development

In 1997, the Federal Council made sustainable development the goal of its government policy. Development is understood to be sustainable if it is able to satisfy current needs without preventing future generations from covering their own needs. Sustainability consists of three key factors: social solidarity, economic efficiency and protection of the natural environment.

In line with this policy, the action programme was checked for sustainability. The results were as follows:

Social sustainability

Mobility plays an important social role in our life. The aim, therefore, is not to restrict mobility. However, social sustainability requires us to protect road users from serious injury. Social sustainability can be increased through Via sicura in that a significant improvement in road safety can spare people a great deal of suffering, fear and worry (welfare gain).

Economic sustainability

Apart from the cost-benefit considerations referred to in section 5.1, other economic effects of the Via sicura measures were examined, such as potential impacts on employment, consumption, productivity, competition, innovation and attractiveness of location. The measures will affect these factors either not at all or in a positive way, though in the latter case only to a modest extent. Via sicura does not have the effect of distorting competition and is seen as perfectly harmless in the light of the regulation impact analysis guidelines produced by the State Secretariat for Economic Affairs, seco.

Environmental sustainability

The mandatory use of lights during the day may have a negative impact on the environment as it is expected to increase fuel consumption. However, other measures are designed to persuade drivers to adopt a style of driving that is steadier and more calm, considered and economical. It may be assumed, therefore, that the environment will not come to any overall harm through Via sicura.

5.6 Conclusions

Positive net benefit	Simply from an economic point of view, Via sicura shows positive net benefits. The benefit from reduced accident costs exceeds the costs of the measures. Indeed, by certain measures, the difference is considerable.
Easy to finance	Via sicura can be financed through a modest supplement on the premium for third party motor insurance. Indeed, the insured will even benefit in the long term through reductions in premiums (or at least through smaller increases in premiums).
Feasibility	Overall, the package of measures is feasible and can be implemented. Via sicura requires changes in laws, ordinances and instructions. International law will be fully respected in this regard.

Inattentive pedestrian injured

A man stepped onto a pedestrian crossing directly without looking in either direction and was hit by a car. Although the driver was within the speed limit and applied the brakes immediately, she was still unable to stop in time. The pedestrian suffered serious injuries.

In 2003, inattentive or distracted pedestrians caused:

- 4 fatal accidents
- 20 accidents with serious injuries



Via sicura measures to prevent accidents involving pedestrians:

- traffic calming measures
- elimination of potential danger spots
- elimination of accident black spots
- awareness-raising campaigns
- traffic separation and coexistence solution

6 Implementation planning

6.1 Report to the Federal Council

Application for funds

The first step in the process of implementation is the report to the principal. The Federal Council assigned DETEC the mission of drawing up a road safety policy under which the number of road deaths could be reduced to a maximum of 300 by 2010. This mission is accomplished with this action programme. However, the precondition for the achievement of the goal is that the resources needed for implementation be made available in full and in good time.

For the scheduled preparation of the legal changes and the implementation of all the measures that do not require amendments to the law, FEDRO needs an increase in its budget for personnel and resources.

Measures not requiring legal changes

Once the resources have been made available, it will be possible to implement measures that can be initiated in the short term:

- awareness-raising campaigns
- instruction in mobility and safety at all levels of education
- increasing the percentage of cyclists wearing helmets
- optimising traffic management and visibility at roadwork sites
- separation of traffic flows on country roads
- extending the international commitment to vehicle safety
- acting in international bodies for crossborder prosecutions of traffic offences
- developing international contacts in the field of road safety.

Phased implementation of measures

At the same time, a proposal will be submitted to the Federal Council in this action programme that measures requiring prior amendment of the law be implemented in successive phases as and when resources become available (see 6.2 below).

6.2 Legislation

First package of legislation

The package of legislative amendments is to be started first at federal act level, as the financing of implementation by the cantons and communes is crucial for the success of the new road safety policy. The Confederation cannot significantly reduce the number of road deaths without increased efforts by the cantons and communes, which will also need more financial resources to step up their work.

6 Implementation planning

This requires, in the first place, the creation of a legal basis for the financing of implementation at the level of the Confederation, the cantons and the communes, namely:

- the levying of a supplement on the third party liability insurance premium
- the allocation of resources to the cantons and communes with performance agreements.

The following measures, for example, also require legislative amendments:

- fast-tracked and standardised sanctions procedure
- analysis of accident black spots and danger spots
- improved accident statistics
- 100 % reliable breath tests
- alcohol ban for new drivers
- alcohol ban for professional drivers
- systematic retraining of repeat offenders.

The basis for the new tasks and obligations will be set down in legislation. The Federal Council will then adopt regulations in the form of ordinances. These measures will probably come into force in 2009, some a few years later, depending on the need for ordinances and the cost of implementation in the cantons and communes. The actual timing will depend on the resources available.

Second package of legislation

The second package of amendments will contain measures which no longer need extensive clarifications and can be presented to the Federal Council quickly. They include for example:

- mandatory use of lights during the day
- improving the visibility of all vehicles
- standardising the criteria for fitness to drive
- introducing quality management for driving tests
- subjecting federal contracts to road safety scrutiny.

The consultation process documents will be drawn up in parallel with the package of legislative amendments in the light of the resources available. In terms of impact evaluations, it was assumed that the measures would start producing effects from 2010. This takes into account the time that will probably be needed for implementation in the cantons.

Third package of legislation

This third package contains the implementing regulations for the amendments to the law (first package), as well as amendments at the statutory order level which had to be deferred for the necessary prior clarifications and so could not be included in the second package. For the assessment of the effect of the measures, it was assumed that they would come into force from 2012.

6.3 Allocation of roles and organisation

Three main factors for success

The implementation of Via sicura requires a clear allocation of roles and appropriate structures. Important factors of success are:

- the determination on the part of all players to increase road safety by working together in accordance with the Via sicura action programme;
- the availability of sufficient human and financial resources at the level of the Confederation, the cantons and the communes; Via sicura intends the Confederation to make available to the cantons and the communes the financial resources needed for the implementation of the tasks assigned to them;
- maintaining and promoting the positive atmosphere fostered by the participatory process by which Via sicura was drawn up.

Road racers

Two young drivers were racing each other at excessively high speeds. One of them lost control of his car, mounted the pavement and ran over two children. Both of the children were killed. The driver was unharmed.

In 2003, speeding drivers caused:

- 163 fatal accidents
- 1,075 accidents with serious injuries



Via sicura measures intended to prevent accidents caused by speeding:

- traffic calming measures
- police spotchecks that focus on safety
- increased traffic controls
- awareness-raising campaigns
- instruction in mobility and safety at all levels of education
- compulsory further training for motorcyclists and car drivers
- fast-track, standardised sanctions procedure

6 Implementation planning

Shared responsibility	The Confederation can only achieve the goal set together with the cantons and the communes and the private organisations involved in road safety.
Confederation	FEDRO is responsible for strategic planning and for overseeing implementation. It prepares the legal bases for the implementation of the measures (including financing). In addition, it coordinates the necessary research and statistics for road safety. The Road Safety Fund is responsible for the implementation of educational measures, respectively for making contributions to private and public organisations which implement them. Educational measures include, for example, awareness-raising campaigns and mobility and safety instruction at all levels of the school curriculum.
Cantons	The cantons are responsible, together with the communes, for the implementation of most measures, particularly in the fields of controls, training and infrastructure.

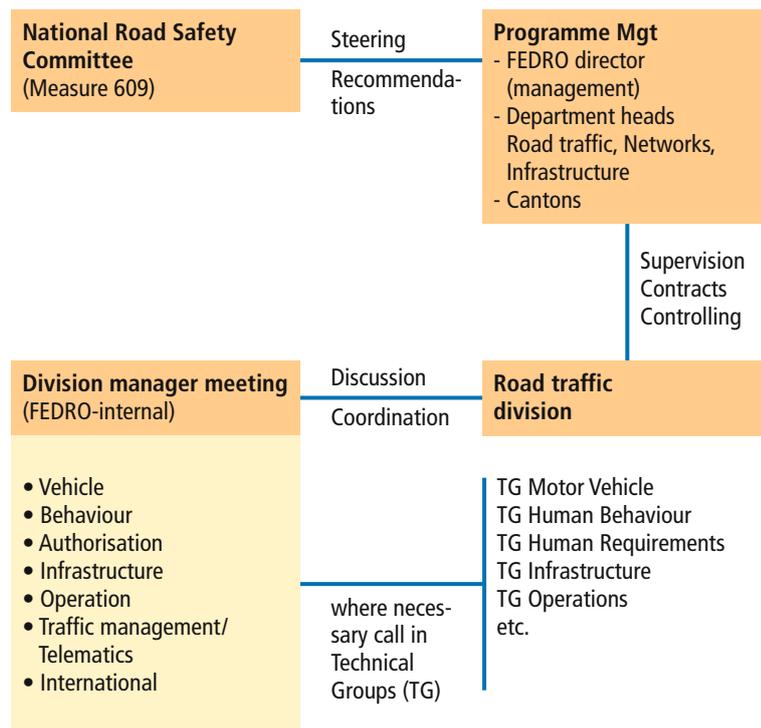


Fig. 4: Programme organisation for the implementation of Via sicura

National Road Safety Committee	A National Road Safety Committee will be set up to assist the implementation of Via sicura. It will serve as a sounding board and assistance group for the FEDRO project management (see Fig. 4).
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Programme control

The Confederation wishes to ensure the implementation of the measures with the cantons, on the basis of the Via sicura strategies, through performance agreements. The cantons will be left the necessary freedom to decide questions of how much and how many, as they are the best placed to judge the most efficient way of achieving greater road safety in their own territory with the resources made available to them.

Programme control will take the form, on the one hand, of evidencing the fulfilment of the agreed performances (output) and, on the other, of verifying the intended effect (outcome). Cantons that succeed in making a more efficient and effective use of the resources provided than that specified in the agreement will be rewarded with a bonus and will receive a higher amount for the services to be performed in the following period.

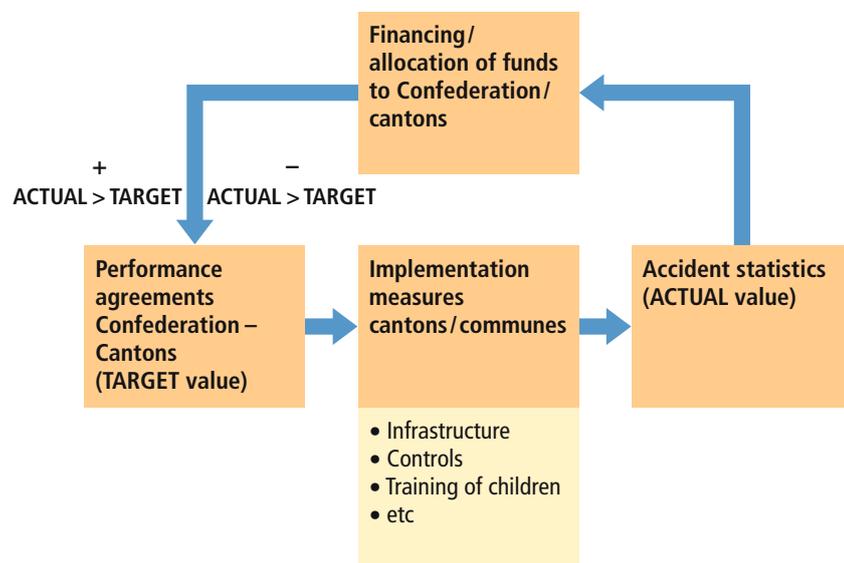


Fig. 5: Control of the programme between the Confederation and the cantons

Private organisations play an important role

Many associations and organisations are currently involved in road safety and make important contributions in this domain. Cooperation with such bodies in the existing framework should not only be continued but also intensified wherever possible. The action programme does not, however, confer any new tasks on these organisations.

To control an action programme, it is necessary, inter alia, to have suitable indicators to measure progress. The main indicator here is the number of road deaths and serious injuries. In order to enable a comparison of the safety level in the different cantons, it is necessary to develop an indicator which takes into account the length of the road network and its traffic capacity, as well as the number of deaths and serious injuries. The result that is sought is not the improvement achieved in relation to the initial status but rather the status achieved as a value that can be compared between cantons.

Evaluation The efficiency and effectiveness of the programme is evaluated periodically (usually every four years) so that adjustments can be made where necessary.

6.4 Communication

External and internal communication The implementation of Via sicura must be accompanied by a professional system of communication focused on specific target groups. The strategy and focus will be laid down in detail in a communication concept.

The task of external communication will consist in raising the awareness of the general public and political circles, as well as in positioning the Via sicura action programme positively with the authorities, associations and organisations responsible for road safety issues.

Internal communication serves mainly to inform and motivate all those who are involved. It should ensure an open exchange and a functioning coordination within the programme organisation.

Collision caused by fatigue and inattentiveness

A driver nodded off as he drove into a tunnel. His car crashed into a motorcycle at full speed. The motorcyclist was dragged along by the car, run over and fatally injured.

In 2003, momentary lapses or inattentiveness resulted in:

- 95 fatal accidents
- 1,048 accidents with serious injuries



Via sicura measures intended to prevent accidents caused by fatigue and inattentiveness:

- awareness-raising campaigns
- compulsory further training for motorcyclists and car drivers
- facilitated establishment of driving impairment
- enhanced international commitment to vehicle safety

Summary

Starting point	Every year, more than 500 people die on Switzerland's roads (2003: 546) and nearly 6,000 are seriously injured (2003: 5,862). A quarter of those killed and injured are young people aged between 16 and 26. Road accidents are a source of incalculable grief in society and, for those concerned, often result in social difficulties, personal restrictions and material worries. In addition, road accidents cost around CHF 13 billion every year, taking a conservative estimate of the intangible damage suffered by the victims.
Development of road safety	Since the 1970s, Switzerland has made considerable progress in road safety and, despite an enormous increase in traffic volumes, has succeeded in reducing the number of road deaths and serious injuries by around a third. Compared with other European countries, Switzerland ranks among the leaders. However, since the beginning of the 1990s, the fall in the number of accident victims has stagnated and a new impetus is now needed to bring about further progress. Other European countries are also increasing their efforts in this domain.
VESIPO project mandate	Since 2002, road safety policy has been an integral part of the Federal Council's sustainable development policy. On the basis of the Vision Zero safety policy, the Federal Council wants the number of those killed and seriously injured on the roads to be halved by 2010 without any restriction on mobility. Against this background, the Federal Roads Authority (FEDRO) was charged with the tasks of formulating a new federal road safety policy and preparing target-oriented measures. FEDRO carried out this tasks under the heading of the VESIPO project and now presents the corresponding action programme under the name Via sicura.
Principal objective of Via sicura	On the basis of the mandate given by the Federal Council, the principal objective of Via sicura is to reduce the number of road deaths to under 300 by 2010 and the number of seriously injured to under 3,000. Thereafter, the number of those killed and seriously injured is to be reduced by at least 30 % every ten years.
Broad approach to intervention	As road safety depends on many factors, the strategic approach to reducing the accident toll needs to be correspondingly broad. The main influencing factors or intervention levels for Via sicura are as follows: <ul style="list-style-type: none">• social awareness• road user behaviour• vehicle safety• the safety of the road infrastructure• the performance and quality of the rescue services.

Summary

56 measures in 10 fields of action	The Via sicura action programme consists of a total of 56 measures in ten different fields of action. The measures were selected from more than a hundred ideas on the basis of a standardised rating system. They offer – as far as it is possible to judge today – some guarantee that with consistent implementation, the number of deaths and serious injuries can be reduced to the desired extent. The main measures are as follows:
Awareness-raising and education	In the 'Awareness-raising and education' field, Via sicura lays down measures particularly for effective awareness-raising campaigns and for the promotion of mobility and road safety education at all levels of the school system.
Training and further training	In the 'Training and further training' field, the measures provided for compulsory further training for all motorcyclists and car drivers and systematic retraining of persons guilty of dangerous behaviour on the road.
Regulations on conduct	In the 'Regulations on conduct' field, Via sicura wishes to introduce an alcohol ban for new drivers and for professional drivers, to make the use of lights during the day mandatory for motorcyclists, and to raise the percentage of cyclists wearing helmets.
Control and sanction systems	In the 'Control and sanction systems' field, the emphasis is on increasing the number of traffic controls substantially (focusing on behaviour most relevant to road safety) and on organisational and technical measures to improve law enforcement.
Motor vehicle	In the 'Motor vehicle' field, Switzerland wishes to commit itself on the international level more strongly than in the past to the highest possible safety standards in vehicle technology. At the national level, provision is made for improved regulations for lights, as well as tighter restrictions on the modification of wheels and tyres.
Road infrastructure	In the 'Road infrastructure' field, systematic efforts will be made to eliminate accident black spots and danger spots. Further measures concern the separation of traffic flows (outside towns) and coexistence solutions and traffic calming measures (inside towns), as well as an increase in the safety of work sites.
Quality assurance	In the 'Quality assurance' field, a whole series of measures aims principally to improve training/further training for road professionals and to develop special instruments for analysis and monitoring (including the use of the road safety audit). Special importance is attached to quality assurance in rescue work.
Research and statistics	In the 'Research and statistics' field, Via sicura seeks to optimise accident statistics and their analysis, to ensure more emphasis on road safety in research, to facilitate the exchange of accident data and research findings and to gain new knowledge through the launch of pilot projects.

International cooperation	In the 'International cooperation', the planned measures relate in particular to the development of bilateral and multilateral contacts with organisations and bodies responsible for road safety issues.
Organisation and resources	In the 'Organisation and resources' field, the focus is mainly on measures to manage and assist the implementation of Via sicura (including the setting up of a new National Road Safety Committee) as well as to ensure the most efficient use of resources possible.
Costs	Over the next fifteen years, the implementation of Via sicura will cost an average of around CHF 670 million per year (approximately CHF 240 million for infrastructure, CHF 220 million for control and sanction systems, CHF 100 million for the vehicle domain, etc.). About two thirds of the costs will be borne by the public purse.
Financing	To finance the uncovered costs of around CHF 300 million per year, provision is made for a supplement on the premium for compulsory third party insurance to compensate the Confederation, cantons and communes for the implementation of the measures in accordance with Via sicura. With the successful implementation of the planned measures, the insured will recover the additional cost in the form of increased safety on Switzerland's roads and reduced accident damage. Indeed, in the course of time, they will probably enjoy corresponding reductions in their insurance premiums.

Annex I

Via sicura: Overview of measures (including rating)

No.	Name of measure	Short description of measure	Criteria						Rating class	Implementation to be completed by
			Potential effectiveness Programme benefits	Efficiency	Implementability	Impact on personal freedom	Protection for the weak	Compatibility with other areas of federal policy		
104	Optimisation of traffic management and visibility at roadwork sites	Roadwork sites and contractors' vehicles on the roads must be designed and marked for greater visibility. The foundations must be established for planning and implementing clear, safe and standardised traffic management.	3	3	4	3	4	3	3	2010
106	Traffic warning equipment at roadwork sites	Where short-term building and maintenance works are being carried out on high capacity roads with no physical separation from traffic, optical or acoustic warning equipment must be installed to warn of vehicles entering the safety zone.	2	3	4	3	5	4	3	2015
107	Standardisation of speed limits	The speed limits on all types of roads must be laid down in accordance with standardised criteria throughout Switzerland.	2	4	4	4	3	3	3	2012
114	Tracing emergency calls from mobile phones	The method of tracing emergency calls from mobile phones must be automated so that the location of the accident can be identified more quickly.	4	5	3	3	3	4	5	2012
116	Guidelines for safe operation and maintenance of road infrastructure	Safety guidelines will be drawn up and implemented for the operation and maintenance of road infrastructure and equipment.	4	5	4	–	–	3	4	2012
124	Psychological assistance	Where a gap exists, care organisations will be established to provide road users and the emergency services with psychological or psychiatric assistance in coping with the experience of major accidents and other traumatic incidents.	2	4	5	3	3	3	3	2012
199	Quality assurance for the accident and emergency services	Education and training for accident and emergency personnel will be extended and quality assurance will be institutionalised for ambulance call centres and the rescue services.	3	1	5	–	–	4	2	2010
205	Restrictions on wheel modifications	Restrictions will be imposed on wheel modifications. From now on, only the tyre and wheel dimensions approved by the vehicle manufacturer will be permissible.	2	5	4	3	3	3	3	2012
209	Universal improvement of vehicle visibility	The regulations concerning the lights and visibility of new vehicles will be improved in order to reduce the danger of collisions.	5	2	4	3	3	3	4	2012
210	Promotion of pilot projects	The Confederation will promote and support pilot projects which could produce significant results and serve to generate further road safety activities (e.g. in the field of telematics).	4	2	4	–	–	4	3	2012
211	Development of the international commitment to vehicle safety	Switzerland will join in UNECE working groups and other international bodies concerned with vehicle safety and will work actively to improve the general safety standards applied in vehicle technology.	4	2	4	–	–	4	3	2012

No.	Name of measure	Short description of measure	Criteria						Rating class	Implementation to be completed by
			Potential effectiveness Programme benefits	Efficiency	Implementability	Impact on personal freedom	Protection for the weak	Compatibility with other areas of federal policy		
212	Enhanced international contacts	Bilateral and multilateral contacts at the political level (EU, CEMT, OECD, etc.) in connection with road safety issues will be intensified and the existing network of contacts will be developed.	4	3	4	–	–	4	3	2012
301	Analysis of accident black spots and danger spots	Accident black spots (conspicuous accident characteristics) and accident danger spots (conflict analysis) will be identified and analysed for Switzerland as a whole.	5	3	5	–	–	3	4	2012
302	Eliminating potential danger spots	Potential danger spots on cantonal and communal roads will be gradually eliminated.	5	2	4	3	3	3	4	2012
303	Eliminating accident black spots	Accident black spots on cantonal and communal roads will be gradually eliminated.	5	3	4	3	3	3	5	2012
305	Traffic separation and coexistence solutions	Specific traffic separation measures (generally outside town) and coexistence solutions (generally in town) will be tested and implemented.	5	3	4	3	5	5	5	2012
306	Traffic calming measures	Zones with traffic calming measures (pedestrian precincts, 30 km/h speed limit, etc) will be demarcated in residential areas.	5	3	5	3	5	5	5	2012
309	Separation of traffic flows on country roads	On busy and potentially dangerous roads outside towns, traffic moving in opposite directions will be separated (e.g. by safety barriers) unless there are compelling reasons not to do so.	4	2	3	2	3	2	1	2012
311	Engineering training for road safety professionals	Training courses will be developed, such as road safety in road infrastructures and in the operation of transport systems.	5	3	5	–	–	4	5	2012
312	Road Safety Audit	Standardised methods will be developed and made mandatory for the assessment of safety deficits in road building projects.	5	3	5	–	–	5	5	2012
313	Additions to the SARR/ Swiss Lighting Association technical standards	Civil engineering standards will be optimised from the point of view of road safety.	4	5	5	–	–	4	5	2012
401	Awareness-raising campaigns	Targeted road safety campaigns will be conducted regularly on key safety issues. The campaigns will be accompanied by intensified police spotchecks.	3	4	5	3	3	3	4	2010
403	Instruction in mobility and safety at all levels of education	The cantons will promote road safety lessons in schools at all levels of education (kindergarten up to upper secondary level). The instruction will be given essentially by outside specialists (usually police traffic instructors). Appropriate modules will also be made available for schools beyond the compulsory education level.	3	2	5	3	5	4	4	2015
405	Warnings on medicine packaging	The fact that a medicine impairs fitness to drive will be indicated on the packaging (e.g. by means of a pictogram).	2	4	4	5	3	3	3	2010

Via sicura: Overview of measures (including rating)

No.	Name of measure	Short description of measure	Criteria						Rating class	Implementation to be completed by
			Potential effectiveness Programme benefits	Efficiency	Implementability	Impact on personal freedom	Protection for the weak	Compatibility with other areas of federal policy		
406	Obligation to warn when dispensing medicines	Medical staff and chemists will be explicitly required to draw the attention of patients to the fact that a medicine or combination of medicines impairs fitness to drive.	2	4	2	4	3	4	3	2012
407	Increasing the percentage of cyclists wearing helmets	The wearing of a helmet when cycling will be strongly promoted through incentives and awareness-raising. If persuasion fails to induce a majority of cyclists to wear a helmet, compulsory measures will be introduced.	4	2	3	2	4	2	3	2012
408	Mandatory use of lights during the day	Vehicles must be driven with their lights on at all times, day and night. If the lights do not come on automatically, the driver will be required to switch them on.	5	2	4	2	4	2	4	2010
411	Police spotchecks that focus on safety	The police will focus their traffic spotchecks (including technical aids) on safety-related errors and danger spots, and will combine them with information campaigns.	5	5	5	3	3	3	5	2010
412	Increased traffic controls	Mobile and stationary traffic controls (including telematics applications) will be increased and cross-sectional speed controls will be supplemented with segment average speed controls.	5	2	2	3	5	3	4	2012
413	Fast-track and standardised sanctions procedures	Criminal and administrative procedures will be fast-tracked and coordinated in such a way that traffic offences can be sanctioned on the spot. The application of the law is to be standardised throughout Switzerland.	3	4	3	3	3	4	3	2012
416	Equipment to check safety distances	The safety distance should be checked more frequently. To this end, the police should be provided with equipment enabling them to check safety distances cost-effectively and reliably.	3	3	3	4	4	3	2	2010
419	Drafting of traffic regulations	Road traffic law must be so drafted that the regulations are clear, comprehensible and easy to implement and that they satisfy the needs of both road safety and the law.	3	4	4	–	–	3	3	2012
422	Commitment to crossborder prosecutions	Switzerland will work actively at the international level for a simple and efficient system for cross-border prosecution of offences.	4	3	3	–	–	3	3	2012
423	Coordination of police controls	A national plan for road safety enforcement measures will be drawn up and implemented. Activities will be coordinated between cantons and countries, as recommended by the European Commission.	4	2	3	–	–	3	2	2012
503	Introduction of quality management for driving tests	Every driving test authority will in future be required to have a certified quality management system for driving tests.	5	5	4	–	–	4	5	2012

No.	Name of measure	Short description of measure	Criteria						Rating class	Implementation to be completed by
			Potential effectiveness Programme benefits	Efficiency	Implementability	Impact on personal freedom	Protection for the weak	Compatibility with other areas of federal policy		
504	Compulsory further training for car drivers and motorcyclists	All car drivers and motorcyclists must take a further training course before their driving licence expires.	4	3	3	4	4	4	5	2018
505	Retraining for motorists found driving under the influence of alcohol or drugs	Any motorist found driving under the influence of alcohol or drugs will be required to undergo retraining, even for a first offence.	4	3	4	3	5	4	5	2010
506	Systematic retraining for repeat offenders	Anyone who is disqualified from driving for at least six months will be required to undergo retraining.	4	3	2	3	4	4	4	2010
508	Alcohol ban for professional drivers	All professional drivers will be required to remain alcohol-free during working and driving hours.	3	4	4	2	4	4	4	2012
509	Standardisation of requirements for fitness to drive	The minimum physical and psychological requirements for drivers will be brought up to present-day standards. For the first time, the necessary cognitive and character requirements will be given legal definition.	2	5	4	2	2	4	2	2010
510	Periodical check of fitness to drive	Driving licences should be subject to a time limit. The validity of the licence should be extended only if the holder can prove continued fitness to drive by means of an eye test and self-declaration or control examination.	5	2	3	2	4	5	4	2012
512	Aids to determine incapacity to drive	Police check points should be provided with suitable equipment to determine incapacity to drive on the spot, irrespective of the grounds for incapacity.	4	4	3	3	4	4	5	2015
513	100% reliable breath tests	Drunkenness should be deemed proven if the result of an appropriate breath test reaches or exceeds a given breath alcohol concentration.	3	3	3	3	4	4	3	2010
514	Quality assurance in ascertaining fitness to drive	Further guidelines and recording instruments will be developed and implemented to determine fitness to drive. Examining medical and traffic psychology specialists will receive appropriate training and regular further training.	5	5	5	–	–	4	5	2010
517	Alcohol ban for new drivers	New drivers will be required to remain alcohol-free while driving during their probationary period.	4	4	3	2	4	4	4	2010
601	Road safety charter	Companies, firms, administrations and the like should be encouraged to sign a road safety charter. Through the charter, the organisation concerned declares itself in favour of principles and measures to increase road safety.	2	3	5	4	3	4	3	2010
602	Road safety label	A road safety label will be created for companies, firms, administrations and the like. The label attests to the particularly road-safety conscious behaviour of the organisation concerned and its members.	3	3	4	4	3	4	4	2012

No.	Name of measure	Short description of measure	Criteria						Rating class	Implementation to be completed by
			Potential effectiveness Programme benefits	Efficiency	Implementability	Impact on personal freedom	Protection for the weak	Compatibility with other areas of federal policy		
604	Road safety scrutiny of federal projects	All major federal projects in the field of road transport must be scrutinised for compatibility with road safety.	4	3	5	–	–	5	4	2012
605	Development of a road safety research database	Information and findings of road safety research (national and international) are to be recorded in a database and prepared for user-friendly exploitation so that gaps in research can be identified earlier and so that research work can be networked.	4	3	4	–	–	4	3	2012
606	Strengthening of road safety interests in research	More research should be conducted on road safety and it should be more targeted. Higher priority should be given to research into new or unexplored aspects of road safety.	4	5	4	–	–	3	4	2015
607	Exchange of accident data	The insurance companies will make their accident data available for research and prevention purposes. The Confederation will promote the exchange of data and ensure its protection.	4	5	4	–	–	3	4	2012
608	Improvement of accident statistics	Accident statistics will be optimised in relation to the accidents recorded, the quality of the data recorded, the possibility of cross-referencing the accident data with additional characteristics from other records, and the analysis of the data.	4	3	5	–	–	5	4	2012
609	Formation of a National Road Safety Committee	The Confederation will assume an active role in coordination and cooperation. A National Road Safety Committee will be set up to monitor the implementation of Via sicura.	5	5	5	–	–	3	5	2012
611	Management of road safety policy	The Confederation will manage, coordinate and oversee the implementation of road safety policy and will provide for the necessary organisational requirements.	5	3	5	–	–	5	5	2010
616	Using resources as efficiently as possible	The award of public funds for road safety will be systematically examined for cost-effectiveness and correspondingly optimized.	5	4	4	–	–	5	5	2012
621	Research into the cause of accidents	Accidents (major incidents, roadwork accidents) will be systematically analysed and assessed in terms of road behaviour, constructional, technical and organisational measures and the response of the rescue services.	4	2	5	–	–	3	3	2012

Annex II

List of participants in the VESIPO project

Senior project management

Name	Representing
Jeger Werner	Federal Roads Authority (FEDRO), Chairman
Dieterle Rudolf	Federal Roads Authority (FEDRO)
Egger Michel	Federal Roads Authority (FEDRO), until 2003
Gantenbein Andreas	Federal Roads Authority (FEDRO)
Huguenin Raphael Denis	Swiss Council for Accident Prevention (bfu), assessor
Röthlisberger Jürg	Federal Roads Authority (FEDRO), as of 2004
Schneider Daniel	Federal Roads Authority (FEDRO), assessor, until 2003
Schrade André	DETEC General Secretariat (GS/DETEC)
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Project management

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Buser Felix	Federal Roads Authority (FEDRO)
Julmy Christoph	Federal Roads Authority (FEDRO), deputy project leader

Monitoring committee

Name	Representing
Aeschbacher Rudolf	National Council (Committee for Transportation and Telecommunications); Pedestrian Mobility
Anderwert Ernst	Intercantonal Road Traffic Commission
Ayer Roland	Swiss Association of Automobile Dealers (AGVS/UPSA), until 2003
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Dicht Heinz	Conference of Cantonal Engineers
Eichenberger Fred	Swiss Association of Driving Schools (SVFV/FSMC)
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Annex II

List of participants in the VESIPO project

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Name	Representing
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Name	Representing
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Burch Daniel	Touring Club Suisse (TCS)
Burgherr Rudy	Agricultural Accident Prevention Service (BUL/SPAA)
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Witzig Gottlieb	Federal Roads Authority (FEDRO)

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Via sicura

Federal Action Programme
for Greater Road Safety

Masthead

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