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ROAD  
SAFETY  
PROGRAMME

2030



## AUSTRIA'S MOTORWAYS TO BECOME A “SAFE SYSTEM”

As a leading motorway operator in Europe, we have an ambitious, yet clear standard: we build and operate the safest motorways and expressways. Our goal is to keep getting even better. Getting better means saving and protecting lives: recording fewer accidents, and above all having to mourn fewer seriously injured persons or even fatalities.

It is under this condition that we at ASFINAG view our work in the field of road safety. The 2020 road safety programme was and has already proven to be a great step in the right direction. However, with our 2030 programme, we are setting the bar even higher.

We want our roads to become a “Safe System”. We understand this to mean infrastructure that forgives small errors made by the drivers, thus saving human lives. We have already implemented such measures, which guarantee precisely this, in recent years. For example, second tunnel tubes were constructed to eliminate areas with oncoming traffic, and we installed impact terminals and crash cushions at critical points.

Categorised into 13 action fields and eight topics, our experts have now mapped out the path ahead that we must all take together in order to achieve our goals, which are by all means highly ambitious. Yet not only we at ASFINAG must rise to meet this challenge, but also all other participants in the traffic network – emergency response organisations, legislators, vehicle manufacturers and, above all, road users. Only if everyone involved in the “motorway system” comes together to ensure optimum interaction can this system become even safer.

Our road safety is a matter of teamwork – everyone does their bit. And this is our goal with the 2030 road safety programme.

**Hartwig Hufnagl and Josef Fiala**  
ASFINAG Executive Directors



## Überblick ASFINAG Strategie 2030+

From builder, operator and toll fee charger to future-oriented mobility partner. This is ASFINAG's goal in the next few years. The strategy 2030+ has been especially designed to position ASFINAG as a reliable, innovative and sustainable partner for its clients as well as for Austria's overall mobility system.

### ASFINAG VISION 2030

„We are a reliable, innovative and sustainable mobility partner, linking people and regions at the heart of Europe.“

### ASFINAG MISSION

Together with our partners, we are ensuring mobility for generations to come. With forward-looking, sustainable and innovative solutions, we represent part of Austria's major shift in mobility.

- We invest in the quality of our network, constantly developing it both ecologically and economically with Austria's overall mobility system in mind.
- As a competent road operator, we offer our customers safe and efficient motorways and expressways.
- With our modern toll products & digital information services, we are a customer-oriented service provider.

### ASFINAG core strategies

Based on the vision 2030, we are developing core strategies for the ASFINAG core business areas as a means to ensure that this vision is achieved. All core strategies are defined by a guiding principle that goes hand in hand with the vision, are divided into several fields of action and are backed up by specific goals, benchmarks and measures. This document describes the core strategy of road safety. As a supplement to the nine core strategies, eight divisional strategies have been developed in order to align all activities with the Strategy 2030+.



Road safety



Service and control



Availability



Sustainability  
Ecologisation &  
climate protection



Multi-modality,  
parking, breaks



ITS



International affairs  
& cooperations



Innovation



Construction and  
maintenance

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**WE MAKE  
AUSTRIA'S MOTORWAYS  
THE SAFEST IN EUROPE.**

When it comes to safety, the roads by ASFINAG are among the top class in all of Europe.

With the 2030 road safety programme, we aim to reach the absolute pinnacle – together with all the road users in our network!

Together with our customers, we want to raise the safety of our motorways and expressways to an even higher level!

With a new road safety strategy, we will master the challenges of the decade by 2030.

MOTIVATION

# MOTIVATION & BACKGROUND

For our customers, we want the safest motorways and expressways in Europe!

Traffic accidents destroy families, cause permanent physical and emotional suffering and, last but not least, lead to high economic costs. Accidents are often also the cause of traffic jams, creating secondary accidents and expensive damages to infrastructure. This is why the 2030 road safety programme takes a systemic, interdisciplinary safety approach. It forms the framework for all ASFINAG safety initiatives, combining clear goals and efficient measures for one purpose: avoiding serious accidents and reducing accident consequences.

## WHAT IS OUR MOTIVATION?

We provide safe, reliable mobility on our motorways and expressways, thus making an important contribution towards Austria as a business location.

## WHAT DOES THIS LOOK LIKE IN PRACTICE?

We are committed to our social responsibility as a road operator, and have made it our goal to reduce the risk in the long term of having a serious or fatal accident on an Austrian motorway or expressway.

## WHAT HAVE WE DONE SO FAR?

With our highly successful first **ASFINAG road safety programme** from 2010 to 2020, we completely revitalised our entire safety processes, thus taking a leap to become one of the leaders throughout the EU. Now, we want to continue on this path to success with a new strategy. Despite the widely varying starting conditions, the Austrian motorway network has achieved a uniform, high standard.

Even with a constantly increasing volume of traffic, we must continue to improve upon this. With a **network length of over 2,200 km with 165 tunnels and more than 5,700 bridges**, this is a particular challenge. This is why we have made it our aim to always employ the very latest technology and developments in the construction and operation of all further safety enhancements.

## WHAT IS THE FUTURE APPROACH?

ASFINAG has analysed internationally successful programmes, projects and measures, and has used these findings to develop a **Systemic Safety Strategy** for the decade until 2030. This type of proactive approach, like the globally renowned Swedish “Vision Zero”, is described as a **“Safe System Approach”** by the **World Road Association PIARC** and the **OECD**.

Just as the traffic systems of each country are different, however, it is also necessary to adapt this approach to the local circumstances and requirements, which means using **system-wide measures** to develop a **positive road safety culture**. We call this the “ASFINAG Systemic Safety Approach”.

## COLLABORATION

We cultivate regular exchange with numerous institutional partners to ensure that we are continually improving the safety of Austria’s motorways and expressways.

These include in particular the **BM.K** (Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology), the **BM.I** (Federal Ministry of the Interior) and the **KfV** (Austrian Road Safety Board). We also regularly coordinate with our **European partners** at **ASECAP** (European Association of Operators of Toll Road Infrastructures) and the **World Road Association PIARC** so as to promote the most successful safety measures together.

# THE NEW STRATEGY

For the decade until 2030, we have developed a Systemic Safety Strategy with which we shall make Austria's motorways and expressways into a Safe System.

We have categorised our projects into **eight topics** that cover all sub-areas of our road safety work in an interdisciplinary manner, from infrastructure safety to raising awareness.

## Organisation of our safety work by 2030

The core strategy of the road safety programme comprises clear and transparent **goals** for the reduction of accidents, severe injuries and fatalities as well as a series of additional safety-related **sub-goals** that we aim to achieve by 2030. All indicators shall be subject to ongoing analysis, and shall be presented each year in an ASFINAG safety forum.

Here, representatives from all specialist divisions of ASFINAG will discuss the adjustments of measures needed to attain goals, if necessary also with the inclusion of experts from other organisations and institutions. At least once a year, updated **accident statistics** will be made available online.

## From strategy to action programme

The demands made of the road system are constantly changing: the volumes of traffic are increasing, more and more new mobile communication devices threaten to distract road users from the task of driving, and the developments in driver assistance and automation also present new opportunities and challenges for road safety.

Hence the division of our goal of setting up a **Safe System** by 2030 into several one to two-year action programmes, to ensure that we can do justice to the respective challenges of the moment. These programmes each encompass specific **measures** and projects including responsibilities and available budgets as well as – where meaningful – specific further targets and figures.



# SAFE SYTEM APPROACH

The Austrian motorways and expressways as a “Safe System”?  
In practice this means: everyone plays their part to avoid fatalities and seriously injured persons as far as possible - infrastructure, vehicle technology, emergency services and of course all our customers.

These are the characteristics of the new systemic safety approach by ASFINAG:

## ERROR TOLERANCE

Looking at accident statistics, we know that accidents are frequently triggered by unintentional errors made by drivers. Unfortunately, such accidents will not be completely unavoidable even in future. After all, people’s actions are never fully error-free, even with perfect infrastructure, comprehensive monitoring, good driving education and vehicles in perfect technical condition. Therefore, the ASFINAG road network should be made as tolerant as possible towards small mistakes and defects – and the accidents caused by such errors should lead to as few cases of fatalities or serious injuries as possible.

## MINIMISING ACCIDENT CONSEQUENCES

The human body is only able to withstand the mechanical forces occurring during an accident up to a certain limit without sustaining grave injuries. This is why many of the measures in the context of the programme will focus on reducing the accident consequences.

## ALL LEVELS WORK TOGETHER

The joint assumption of responsibility of all those involved, for example planners, builders, maintenance bodies, authorities, executives, the vehicle industry, emergency services and users, is necessary to continue to improve the level of safety in the long term. However, this by no means implies that the users are released from their duties. Accidents due to gross negligence, such as driving while under the influence of drugs or alcohol, shall be excluded in advance in the considerations and handled separately.

## GLOBAL AND LOCAL RESPONSIBILITY

The safety management of a network as complex as that of ASFINAG relies on the seamless integration of all parties, which is why all AS-FINAG employees in each region will live by the new safety philosophy and pro-actively promote the improvement process (“section responsibility”).

## NATIONWIDE GOALS

Road safety goes hand in hand with other national and economic goals and possibilities. In the event of conflicts of objectives, balanced and transparent decisions must be made in consideration of the known influencing factors. Generally, a 100% target attainment of all partial factors in the road system is not possible. The idea, therefore, is to develop the best possible versions in a comprehensive approach and to contrast these with the partial approaches.





## GOALS

The successes in our safety work need to be measurable. For the years leading up to 2030, therefore, we have set ourselves ambitious targets of reducing traffic fatalities, serious injuries and accidents. In addition, we also want to achieve a whole series of specific sub-goals and figures that represent safety-relevant ASFINAG activities.

# GOALS OF THE ROAD SAFETY PROGRAMME 2030

The systemic safety approach by ASFINAG (“Safe System”) pursues the same long-term concept as that of the Swedish philosophy “Vision Zero”: a traffic system without accidents involving fatalities or serious injuries is thoroughly feasible and worth aspiring towards! Since it will never be possible to prevent accidents altogether, we want to strive to at least reduce the severity of accidents permanently.

The successes in our safety work should be measurable. For the years up until 2030, therefore, we have set ourselves reduction targets for fatalities, serious injuries and accidents. In addition, we also want to achieve a whole series of specific figures that each represent safety-relevant sub-areas of the ASFINAG activities.

## Influence of the “Safe System” on the prioritisation of our goals

Traditional safety work predominantly involved striving to minimise the number of accidents to the greatest extent possible. However, ultimately this proves to be a futile endeavour, especially in an age of continually increasing traffic density – and because every person is bound to make unintentional mistakes now and again. This is why, with Safe System, we are implementing a paradigm shift from accident prevention to injury prevention: traffic fatalities and seriously injured persons are unacceptable, but accidents themselves will never be completely unavoidable; some typical Safe System measures (e.g. structural median barriers) may even increase the number of accidents – and especially of material damages – but they do, however, sustainably lower the severity of the accidents.

Alongside our long-term vision of not wanting to accept a single fatality or seriously injured person on our network of roads, we have set ourselves a series of goals for 2030 at three levels:

### MAIN GOAL: FEWER TRAFFIC FATALITIES

The number of people killed per billion kilometres driven should be sustainably decreased to less than 1 by 2030 – this would put us at the forefront in Europe. This kilometre-related number of deaths is the most telling international comparative figure when it comes to the safety of road networks.

Development of the death rate*	
2006 - 2008	3.4
2011 - 2013	2.0
2016 - 2018	1.4

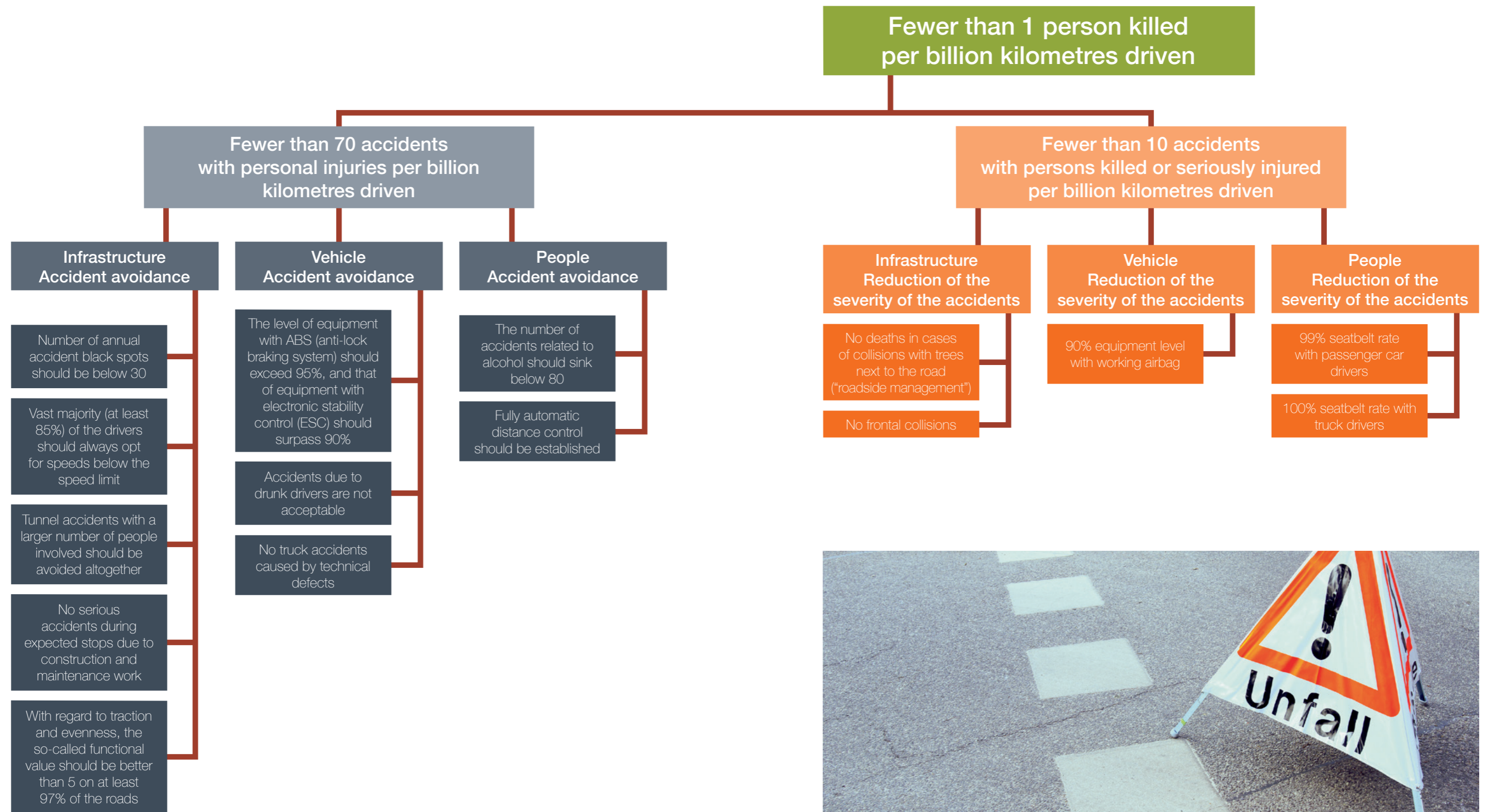
### SUB-GOALS: FEWER SERIOUSLY INJURED PERSONS AND ACCIDENTS

<b>People killed</b>	fewer than <b>1 person killed per billion kilometres driven</b> (death rate) from 2030
<b>Seriously injured persons</b>	fewer than <b>10 accidents with persons killed or seriously injured per billion kilometres driven</b> from 2020
<b>Accidents</b>	fewer than <b>70 accidents with personal injuries per billion kilometres driven</b> (accident rate) from 2020

\* per billion kilometres driven

# PARTIAL GOALS AND KEY FIGURES

Building upon the main and sub-goals, a total of 15 partial goals and key figures serve as a guideline that reflects the quality of safety work in the numerous specialist divisions of ASFINAG and its cooperation partners. These partial goals and key figures have been allocated to the system components of Infrastructure – Vehicle – Traffic Behaviour, and also grouped according to the mechanism of action: accident avoidance or reduction of the severity of the accidents.



## ACTION PROGRAMMES and measures

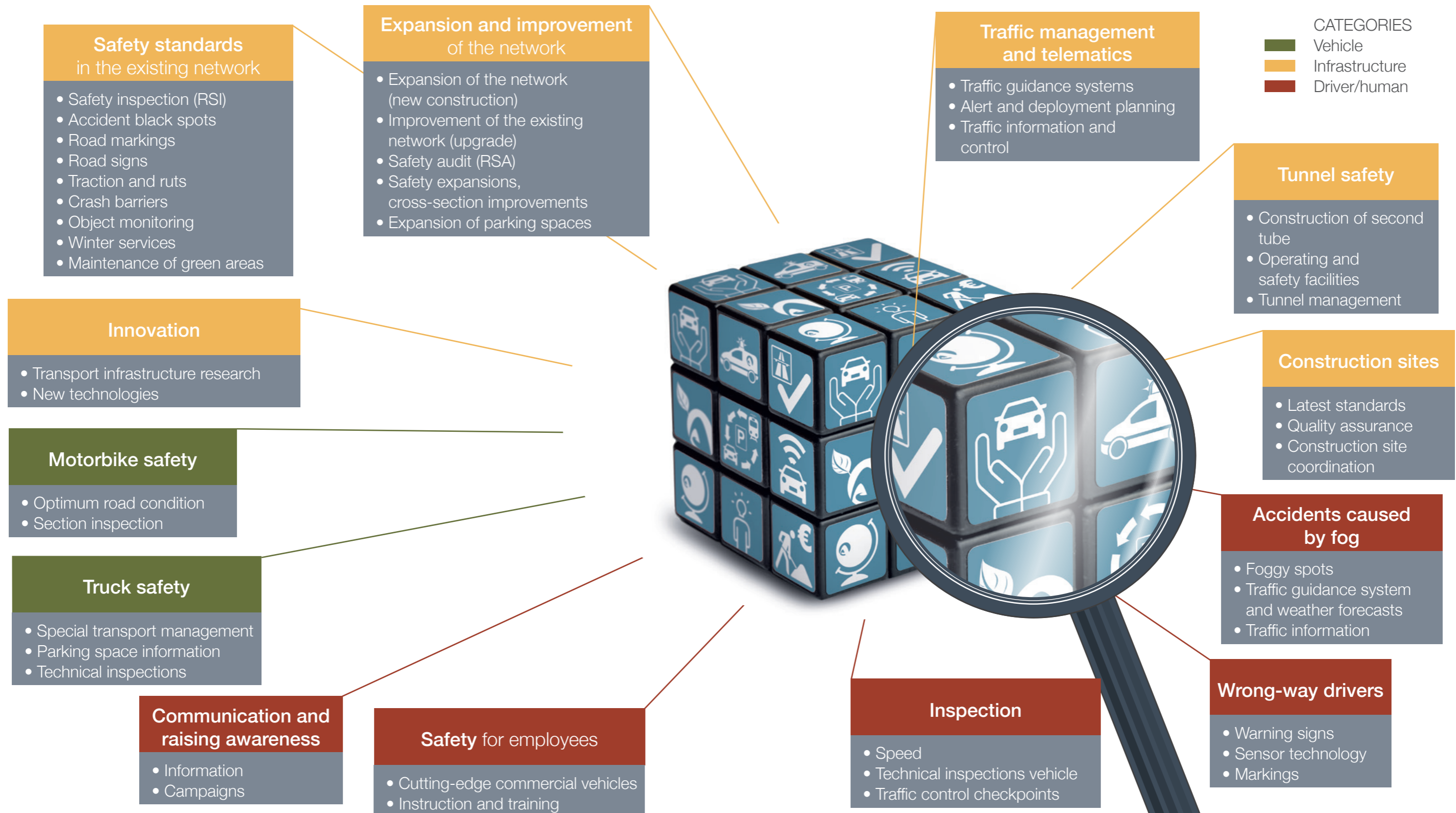


Road safety work for the attainment of the targets means:

- › Maintenance of what has already been achieved and implemented in the **fields of action**
- › Ongoing evaluation and development of further improvements in **current topics**
- › Implementation of measures in the scope of **implementation projects**

# ACTION PROGRAMMES

ASFINAG's road safety work requires commitment in a widely varied range of areas. In order to save even more people's lives, we aim to employ targeted action programmes to meet the rapidly and constantly shifting challenges by 2030.





# ACTION PROGRAMMES

## Fields of action

The ASFINAG road safety programme comprises 13 fields of action, with which we have created an entirely new foundation for our road safety work since 2010.

The measures contained therein are continuously being enhanced and evaluated. Overall, the 13 fields of action encompass the entire operative road safety work carried out by ASFINAG and demonstrate the diversity of the potential safety possibilities.



## Safety standards in the existing network

Road safety is not a one-time project. 365 days a year, around the clock, the ASFINAG employees ensure that driving on the 2,223 kilometres of motorway and expressway is safe and hassle-free. 42 motorway maintenance workers are constantly on the go, inspecting the entire road network daily.

- More than 200 kilometres of in-depth road safety inspections of the existing sections per year (RSI Road Safety Inspection)
- Renovation of approx. 11,300 kilometres of markings per year
- Around 78,207 square metres' worth of renovation of road surface markings (equivalent to the size of eleven football fields) per year
- 50 percent fewer accident black spots since 2010
- Roughly 860 bridges are inspected annually (intervals: routine inspections by the main road service every four months, larger bridge inspections in two-year cycles, main bridge inspections every six years)
- 400 winter service emergency vehicles with GPS navigation
- Cutting-edge weather forecast system with airport weather data
- Vehicle restraint systems for minimising accident consequences in the event of accidents in which drivers leave the road
- In-depth safety inspection – the “Pickerl” (toll sticker) for the road



## Expansion & improvement of the network

In the last ten years, more than eight billion euros have been invested in the improvement and expansion of the Austrian motorway and expressway network. The spectrum ranges from second tunnel tubes and the addition of traffic lanes, to the expansion of traffic control checkpoints and rest stops, all the way to the new construction of entire sections of road. Examples are:

- S 10 Mühlviertler expressway: Unterweikersdorf – Freistadt Nord 2015
- A 5 Nord/Weinviertel motorway: Schrick – Poysbrunn 2015
- A 4 Ost motorway: Traffic control checkpoint Bruck/Leitha 2015
- A 4 Ost motorway: Expansion airport – Bruckneudorf 2015 - 2020
- A 5 Nord motorway: Bypass Drasenhofen 2019
- Investments in new constructions since 2010: 4.2 billion euros
- Investments in existing road sections since 2010: 4.1 billion euros



## Traffic management & telematics

ASFINAG meets the growing demands for reliability, safety and traffic information with a comprehensive measures package:

- Traffic monitoring and control with one national and nine regional traffic management centres
- Creation and distribution of ASFINAG traffic reports via various channels
- Approx. 6,000 traffic cameras on the roads
- 17 traffic guidance systems for controlling the traffic – covering 800 directional kilometres with 710 display cross-sections. This means that 19 percent of the motorway and expressway network is equipped with roadside, variably controllable infrastructure
- Implementation of the mobile task force “Traffic Managers” in the greater Vienna area (20 people, 256 kilometres under supervision) and Linz (12 people, 112 kilometres under supervision) – seven days, 24 hours
- Active incident management for rapid restoration of availability
- Effective traffic management via nine centres
- Networked cars, intelligent traffic: what C-ITS is, what it can do and whom it benefits

## Tunnel safety

At present, ASFINAG operates a road network of 2,223 kilometres in length, on which a total of 165 tunnel systems are currently in operation. Since the start of ASFINAG's tunnel offensive in the year 2000, more than 5.6 billion euros have been invested into tunnel safety (new tunnel constructions, second tunnel tubes, constructional and electromechanical measures including general overhauls as well as expansion of the monitoring centres), whereby the emphasis has been on the construction of second tunnel tubes:

- A 10 Katschberg Tunnel: second tube since 2009
- A 12 Roppener Tunnel: second tube since 2010
- A 10 Tauern Tunnel: second tube since 2011
- A 14 Pfänder Tunnel: second tube since 2013
- A 9 Bosruck Tunnel: second tube since 2013
- A 9 Klaus chain of tunnels: second tube since 2017
- A 9 Gleinalm Tunnel: second tube since mid-2017, renovation of first tube by 2019
- A 11 Karawanken Tunnel: construction of second tube commenced in 2018

All tunnels are thus equipped to the highest level in terms of safety technology, and are among the very best worldwide. To ensure this remains the case, ongoing investments are made in the renewal of the facilities, and further technical innovations are continually promoted.





## Construction sites

With ASFINAG, the top priority is to keep as many traffic lanes open as possible during the daytime despite construction sites. This means that renovations and new constructions to the existing network are always carried out under normal traffic conditions.

- Clear customer criteria for construction sites: over 100 kilometres, construction sites may only cause a maximum of five minutes' delay – a construction site with an 80 km/h limit may not be longer than ten kilometres, while for a section with 60 km/h it may not surpass six kilometres
- Construction site audits and inspections of critical construction sites
- While in 2004, a total of around six percent of all accidents still occurred on motorways in sections where construction was taking place, this number has been steadily lowered to three percent in the last few years
- 17 traffic guidance systems for controlling the traffic – covering 800 directional kilometres with 710 display cross-sections. This means that 19 percent of the motorway and expressway network is equipped with roadside, variably controllable infrastructure
- Every second euro invested in the improvement of the network goes towards road safety
- Building to ensure safe motorways and tunnels
- Many construction sites, one goal: greater safety, better availability

## Accidents caused by fog

Fog is definitely one of the most unpleasant weather conditions for driving. To ensure drivers arrive safely at their destination, here ASFINAG sets great store by information and good sense.

- Regular maintenance of the marking of approx. 9,000 fog spots
- Over 710 electronic display cross-sections with the possibility of displaying fog warnings
- Use of an ultra-modern weather forecast system
- Fog warnings via traffic radio

Unfortunately, accidents caused by fog can never be fully ruled out; however, there have not been any major accidents with more than 10 vehicles involved since 2008.



## Wrong-way drivers

Since accidents with wrong-way drivers in particular usually have severe consequences, the prevention thereof continues to be of high priority at ASFINAG.

The analysis and inspection of high-risk wrong-way driver zones takes place each year via Road Safety Inspections (RSI).

- Around 220 kilometres of the motorway and expressway networks are examined each year.
- More than 400 wrong-way driver warning signs alert drivers in the access area
- 19 mechanical wrong-way driver barriers
- 3D markings

## Truck safety

When it comes to information about all aspects of traffic, ASFINAG is a reliable partner and provider of cutting-edge services, especially for trucks in particular. These include, among other things:

- Reduction of the proportion of heavy vehicles involved in accidents from 18 percent in 2010 to 13 percent by 2014
- Each year, around 10,000 special transports are arranged with the ASFINAG traffic management
- The greater Vienna and Linz areas offer an electronic truck parking system. Free spaces are displayed via the electronic overhead displays as well as via rotating prism signs. Parking space information can also be called up online
- Nationwide, 13 modern traffic control checkpoints are available for the inspection of heavy vehicles. A further four checkpoints are in the planning stage
- Since 1st July 2015, truck inspections throughout the Austrian motorway network have also been carried out by specially trained ASFINAG employees. In addition to inspections at traffic control checkpoints, these so-called “technical roadside inspections” are implemented in close collaboration with the police



## Motorbike safety

The number of two-wheeled accidents has remained constant at just four to five percent

- 64 percent fewer motorcyclists killed on average (comparison period 2007-2010 and 2011-2014); this has remained equally low in the last few years (2018: 2)
- Approx. 1/3 of the motorbike accidents occur on ramps
- Approx. 40% of the accidents are single-vehicle accidents, while 35% are rear-end collisions
- No local frequencies thanks to high standard of road condition
- Regular cleaning of the lanes, especially in spring

## Communication & raising awareness

ASFINAG has made a clear commitment to supporting behaviour by drivers that is compliant with the law, by means of awareness-raising road safety campaigns. Nine campaigns for greater road safety since 2012. Media: radio commercials, motorway billboards, printed ads, online, social media as well as classic PR work.

- 2012: "Entspannt in den Urlaub" (Relaxed holiday driving) (holiday colouring books and pens)
- 2013: "Drängeln tötet" (Tailgating kills), "Ich komme sicher gut an" (I'll arrive safe and sound) (ASFINAG brochure with tips from A to Z)
- 2014: "Abstand halten" (Maintain a safe distance), "Rechts fahren" (Drive on the right), "Handy weg vom Steuer" (Hands off your mobile phone when driving) (online game), "Mach keinen Mist" (Don't litter)
- 2015: "Augen auf im Tunnel" (Eyes open in the tunnel), "Mach mal Pause" (Take a break) (targeted campaign at ASFINAG rest stops "pupillomat test")
- 2016: "Fair lenken" (Drive fairly), "Rechts fahren, Stress sparen" (Drive on the right, avoid stress)
- 2017: "Hello life"
- 2018: "Hello life - distraction"
- 2019: "Hello life - maintain a safe distance" (targeted campaign of distance measurement at eight locations)



## Inspection

As an infrastructure operator, ASFINAG operates many types of equipment for monitoring the traffic in cooperation with the states and police:

- Procurement and technical operation of selective speed monitoring units (radar, laser)
- Eleven section control units for stationary and mobile deployment at construction sites
- Establishment and maintenance of traffic control checkpoints for the inspection of heavy vehicles
- WIM - Weigh in Motion systems at critical points

By taking on the competences and the staff for technical roadside inspections, ASFINAG employees make an active contribution to ensuring vehicle safety.

## Innovation

Traffic infrastructure research for new (safety-related) technical developments is of importance to ASFINAG. As a reliable partner in this field, ASFINAG is represented in the following projects, to give an example:

- Financial and conceptual participation in traffic infrastructure research
- Contract research in the field of road safety on the topics of restraint systems, safety management
- Development of new techniques in tunnel monitoring (AKUT - acoustic tunnel monitoring)



## ACTION PROGRAMMES

### Current topics

#### Safety for employees

- Crash cushions in commercial vehicles (trucks, traffic management vehicles)
- Modern and highly visible safety clothing
- Vehicle fleet with highly fluorescent reflective hazard strips
- Safety instruction and training courses
- Semi-automated traffic cone placement machines
- Lights with intense luminosity on winter service vehicles for early awareness
- Complete recording of all accidents and near-accidents for more effective prevention work
- Annual driving safety training courses with winter service heavy vehicles
- Personal emergency call device for safety when working alone

The road system is not a static system, and is influenced by a large number of social requirements

Road safety work, therefore, involves the constant and ongoing further development of the core tasks of all road operations, timely responses to technical developments, and interaction with all those involved in the “Safe System”.

This systematic development from idea to project is implemented in eight current topics in a widely varied range of organisational forms and timeframes.



## Topic: Working on the road

The motorway is our workplace to ensure your safety! For demanding works on the road, safety is the primary objective, both for our employees as well as for all road users.

### Problems

Works along and on the road represent a major contribution to road maintenance. Accidents with road users repeatedly occur in the process. These are usually caused by carelessness, tiredness and inadequate driving behaviour. As a result, at present an average of 15 warning sign trailers are damaged each year (see image). In these cases, workers are often unprotected and rely on proper interaction with the drivers.



Left image: accident with an ASFINAG motorway maintenance vehicle

Right image: rear-end collision with an ASFINAG warning sign trailer

### EXPECTATIONS BY 2030

We want to significantly reduce the number of hazard points for employees as well as road users. This will also further decrease the number of accidents in construction site zones.

### Target levels



Risk avoidance course for safe work along the road

Accidents are not completely avoidable. We at ASFINAG have made it our goal to shift impairments due to maintenance measures to off-peak periods and, where possible, to carry these out away from the main carriageway and to protect our employees in the best possible way.

- Proactive, quality-assured construction site planning
- As few points of contact with flowing traffic as possible
- Upgrading and expansion of the training concept (increasing competences, taking on an active role) to ensure uniform, optimum procedures on the road

### STARTER PACKAGE MEASURES FROM 2020

- **Accompaniment concept**  
Establishing an operational accompaniment concept for new constructions and expansions
- **Low-maintenance and maintenance-free roads**
- **Training courses**  
Intensive training for securing construction sites and behaviour on motorways for site and operations managers
- **Exchange of information with other infrastructure operators**



## Topic: Incident management

Accidents and other incidents will always happen. We work to make sure that these cause as little suffering as possible and that the disruptions are remedied rapidly!

### Problems



Rear-end collision with an ASFINAG warning sign trailer

#### The number of incidents is increasing:

- more traffic and more traffic jams
- relatively large number of consequential and rear-end collisions

#### Each incident and each accident is different:

- wide range of road section characteristics
- wide range of people and vehicles involved in accidents
- many different responsible emergency response organisations
- widely differing communication channels between the emergency response teams
- timely provision of relevant traffic information for customers

#### The framework conditions are changing:

- increasing amount of incident information
- road and vehicle infrastructure with different technical standards
- different degree of information amongst emergency response teams and new channels

### EXPECTATIONS BY 2030

- Traffic volumes and diversity are constantly on the rise. We keep track of developments and continuously adapt our processes accordingly.
- We provide precise information on incidents in a timely manner. We make use of the latest developments in technology to do so.
- Good coordination between the emergency response organisations helps to minimise the accident consequences. The employees at ASFINAG assume additional responsibility in order to promote collaboration between all those involved.

### Target levels

Incident management at the site of the accident is a major component of post-accident care as well as accident prevention, and represents a significant contribution to road safety.

Accidents are not completely avoidable. We at ASFINAG have set ourselves the goal of dealing with incidents actively and in the best possible way, and of avoiding consequential incidents. We support and supplement the works carried out by participating emergency response organisations.

- Active, rapid restoration of normal conditions
- Rapid, consistent transfer of information (internal and external)
- Upgrading and expansion of the task profile (increasing competences, taking on an active role) to ensure uniform, optimum procedures
- Active support of governmental coordination of operations (authorities/ police) and optimum collaboration with emergency/official bodies

### STARTER PACKAGE MEASURES FROM 2020

- **Emergency response training on open terrain:**  
Building upon the good experiences with the tunnel training exercises, training also takes place analogously on open terrain
- **Networking of vehicle – infrastructure**  
Targeted transmission of information to vehicles moving towards danger zones. Better assessment of situation thanks to use of vehicle information
- **Securing tail end of traffic jams**  
Timely warning of traffic jams with stationary or mobile warning systems and operating process targeted towards this
- **Networking of emergency response control systems Federal Ministry of the Interior – ASFINAG: E-call connection**  
Short reaction times and more effective incident handling due to same status of information and less data processing effort



## Topic: Fitness to drive

A lack of fitness to drive has a direct impact on everyone's safety: drivers and passengers, emergency response teams, construction workers and ASFINAG employees.

### Problems



Driving under the influence of medication

Various influencing factors such as alcohol, drugs, medicaments, tiredness or dehydration can impair one's fitness to drive. Age and health status can also have an effect on driving ability. Alongside carrying out checks, it is also important to create awareness of individual fitness to drive or the impairment thereof by providing comprehensive information.

- > **Driving under the influence is no trivial offence**  
Impaired drivers endanger not only themselves, but also their passengers as well as all other road users.
- > **Self-assessment and problem awareness**  
Under the influence of alcohol, drugs or medication, many drivers are unable to correctly assess their fitness to drive. An objective assessment of age-related impairments is also difficult.

### EXPECTATIONS BY 2030

In light of numerous collisions caused by impaired drivers, it is our goal to substantially reduce the number of accidents and accident costs caused by a lack of fitness to drive.

### Target levels

We want zero people injured or killed on Austria's motorways or expressways due to drivers who are impaired or not fit to drive.

- Guaranteeing i.e. increasing the fitness to drive of all road users
- Creation of acceptance via comprehensive, intensive information and awareness raising
- ASFINAG promotes information on and checks of fitness to drive in order to increase self-assessment and awareness of the law. The existing information channels and partnerships are used to this end.

### STARTER PACKAGE MEASURES FROM 2020

- > **Newsletter**  
Information on factors that influence driving behaviour such as drugs and medication as well as health impairments
- > **Website and blog articles**  
In-depth examination of the topic "influencing factors on driving behaviour"
- > **Targeted actions**  
Implementation of increased checks at focal points in consultation with the executive branch





## Topic: Road performance & training

Road safety is a matter of teamwork, and only functions when everybody does their bit!

### Problems

Increasing volumes of passenger and goods transport, more individual mobility and new trends such as automated driving will make traffic even more complex in the next few years. The majority of accidents on motorways and expressways occurs due to the following factors:

- Distraction / carelessness
- Too little distance
- Speeding
- Fatigue
- Non-compliance with traffic rules and requirements (e.g. keeping to the right-hand side)
- Overestimation of one's own driving ability
- Handing over responsibility for one's own actions on the road and in the vehicle
- Excessive demands placed on road users

### EXPECTATIONS BY 2030

The awareness-raising, target group-specific activities by ASFINAG aim to ensure that the majority of people exhibit responsible, safe driving behaviour on motorways and expressways.



### Target levels

ASFINAG invests every second euro in road safety.

However, road safety only works when everybody does their bit. ASFINAG advocates for social behaviour and fair cooperation with others on Austria's motorways and expressways. We want to optimise the driving behaviour of road users in the long term, thus promoting safe driving behaviour.

- Awareness raising and campaigns on road safety topics
- Creating acceptance for laws and regulations
- Promoting responsibility for actions
- Content-related support in driving education

### STARTER PACKAGE MEASURES FROM 2020

- **Newsletter**  
Road safety tips for drivers of vehicles <3.5t maximum allowed weight
- **Road safety tips**  
On website, in blog articles and on social media
- **Info points at rest stops**  
With traffic information and local indications.
- **Road safety for truck drivers**  
Elaboration of measures together with the target group



## Topic: Vehicle equipment

A safe overall system requires corresponding and homogenised safety standards for the vehicles.

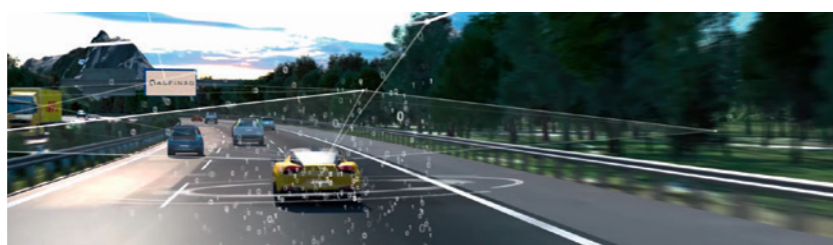
### Problems

Modern vehicles and driving assistance systems can contribute a great deal towards safety. However, incorrect use of modern technologies can also result in accidents.

- The cause of accidents is often unknown, yet at the same time there is an increasing proportion of accidents due to distraction
- Deliberate deactivation of assistance systems
- Incorrect expectations of function and effect of driver assistance systems
- Insufficient or overly difficult operation of driver assistance systems
- Defects in maintenance and updates: airbag, navigation systems
- Market penetration of new vehicle equipment takes around 20 years

### EXPECTATIONS BY 2030

In view of the great safety potential of modern vehicle technology, we will push for the installation of proven safety-promoting assistance systems and promote the correct use thereof.



### Target levels

Active and passive vehicle safety features compensate for human, infrastructure and vehicle errors and defects. Effective safety assistants can reduce the number of accidents as well as the severity of the accidents.

Using incentive models and/or restrictions, the aim is to achieve the highest possible standard of safety equipment.

- Improvement of the safety equipment of vehicles by influencing external interfaces
- Raising awareness of the effects of safety equipment

### STARTER PACKAGE MEASURES FROM 2020

- **Study on the degree of vehicle equipment**  
Ongoing survey of which vehicles are currently fitted with which driving assistants
- **Establishing in-depth accident investigation for serious accidents in Austria**  
Establishing detailed investigations of serious collisions
- **Info campaign on passive safety features**  
"The use of vehicle safety features can save your life"



## Topic: Inspection

We are committed to active Road Safety Enforcement in order to increase the road safety!

### Problems



Permanent driving in the left or middle lanes and too little distance provoke accidents

Inspections secure the motorway system, and service creates acceptance! Efficient and transparent inspections are required in order to guarantee compliance with the necessary regulations, and thus to ensure safety. The main problems include:

- Tailgaters
- Speeders
- Drivers staying in the left lane
- Trucks with grave technical defects overloaded or incorrectly loaded vehicles

### EXPECTATIONS BY 2030

We want to establish Road Safety Enforcement as a transparent and efficient concept for all inspection measures, together with our cooperation partners in ministries, the authorities and the executive branch.



Left image: technical roadside inspection  
Right image: weighing of special transport



### Target levels

Active Road Safety Enforcement is an essential factor in reducing human suffering due to accidents on motorways and expressways.

Technical innovations and specialisation are necessary, with the application and continued development of available resources. As an operator of the high-ranking network, we possess the know-how and the resources to drive forward Road Safety Enforcement in an efficient, timely manner.

- Creation of organisational / personnel structures and provision of technical facilities.
- Expansion and securing of the inspection competences
- Technical roadside inspection
- Weighing of special transport

### STARTER PACKAGE MEASURES FROM 2020

- **Distance measurement**  
Development of a largely automated distance measurement system
- **Weigh in Motion**  
Advanced technical development and expansion of the locations for detecting weight in flowing traffic.
- **Technical inspections**  
Increasing inspection frequency and support of the executive branch
- **Traffic control checkpoints**  
Expansion and further development of the network



## Topic: Road design

In the future, we will provide a self-explanatory, forgiving and high-quality road network.

### Problems



An increasing volume of traffic and high speeds frequently lead to critical situations and accidents. The more self-explanatory the design of the infrastructure, the fewer errors occur. Since incorrect behaviour on the part of the road users can never be completely avoided, it is important to design the infrastructure so that it is forgiving. Critical points include

- Frequent changes in speed
- Irregular curves
- Lane reductions
- Section widths/hard shoulders
- Weather-related visibility conditions
- Road conditions when wet

### EXPECTATIONS BY 2030

Our paramount goal is to establish a continuous Safe System on our motorways. This begins in the planning stages, and also entails increasing demands made of construction and operations.

### Target levels

The vehicle drivers travel on our motorways and expressways at high speeds. By rapidly identifying situations and implementing appropriate reactions, accidents can be avoided.

We have declared it as our goal for our roads to be designed in a self-explanatory and forgiving manner. This begins with optimisations in the planning phase. Due to framework conditions and local circumstances such as limited spatial conditions, in retrospect adaptations to the existing network can only be renovated.

### STARTER PACKAGE MEASURES FROM 2020

- **Securing green areas**  
Following a needs assessment, the legal framework conditions for sustainable roadside management will be created
- **Quality offensive for planning, construction and operation**  
This means, amongst other things, the adaptation of internal rules, a mentoring programme for new employees, the redesign of tender documents and implementation of an incentive system for contractors, cooperation with universities/technical colleges/secondary technical schools etc.
- **Guiding concept and colour concept**  
Identification of critical points and review of possible construction measures i.e. creation of a clear guiding and colour concept



## Topic: Prohibitions, requirements and restrictions

Modern and safe roads require comprehensible, efficient and transparent laws for the road users as well as the operators.

### Problems



Section control

Successful safety work is based on the permanent further development and adaptation of the legal foundations. To this end, the legal and normative framework conditions must be constantly checked as to their topicality, comprehensibility, effectiveness, applicability and administrative practice, and suggestions for improvement must be elaborated. The focus is on:

- Interests i.e. laws opposing the safety concerns
- Barriers in the distribution of powers, federalism
- Improvement in comprehensibility, announcements
- Lack of knowledge or information amongst the target groups
- Limited applicability of some regulations
- Acceptance among policymakers and users

### EXPECTATIONS BY 2030

We want to significantly reduce the number of hazard points for employees as well as road users. This will also further decrease the number of accidents in construction site zones.

### Target levels

Efficient, accurate provisions and regulations can make a substantial contribution towards increasing the safety of road users. ASFINAG is actively involved in the design of legal and normative foundations so that we can offer our customers a safe motorway and expressway network under ecologically and economically acceptable conditions.

- Consideration of a range of legal matters regarding conflicts of objectives in road safety
- Simplification and increasing efficiency in inspections and sanctions
- Aspiring towards uniform, clear announcements throughout the network
- Support for training in technical and legal content
- Evaluation of the foundations for checking fitness to drive

### STARTER PACKAGE MEASURES FROM 2020

- > **Maximum speed during rain**  
Reducing the actual speeds during rain and wet conditions
- > **Signage**  
Standardisation of the signs for easier identification and better understanding
- > **Section control**  
Expansion of the areas in which section control systems are used

## LEGAL DETAILS

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