

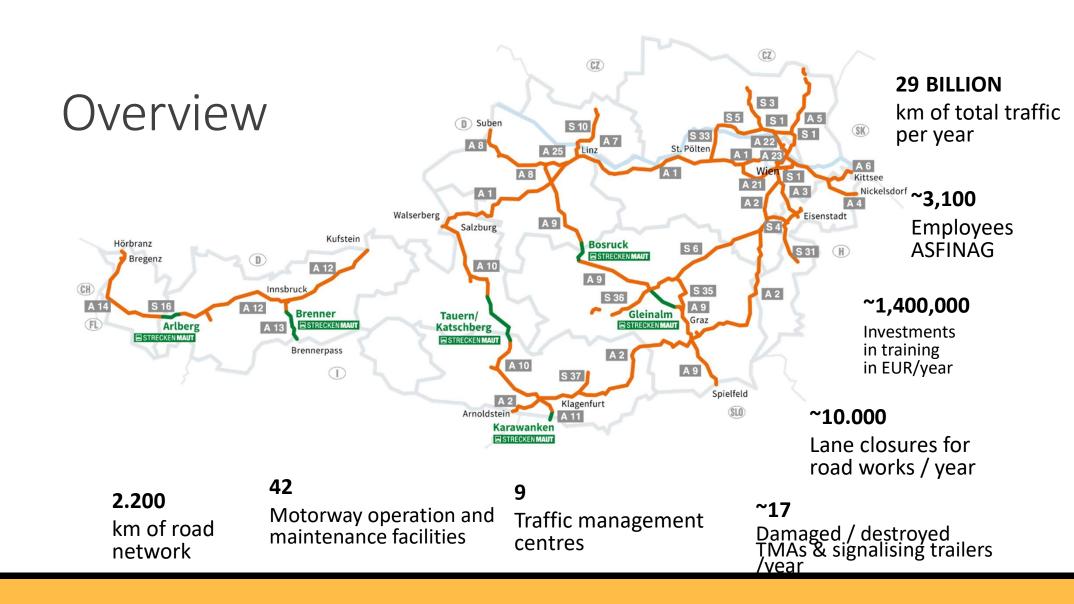
## "Vision Zero 2030: Road Safety Strategy for the construction of a Safe System"

Experience in Managing Highways and Expressways in Austria Best practices, focus campaigns, innovations, training approaches and staff education processes on road work zone safety Grupo Brisa

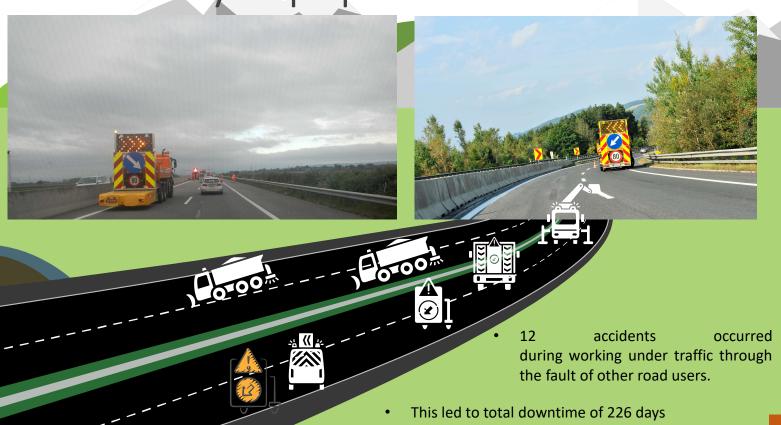
David Kollenhofer, Team Leader Technical Operation Management – ASFINAG, Vienna With the support of

Abre caminho

With the Coordination of ANSR



# Our fleet and Statistics of Work Zone Safety Equipment



In two of these accidents caused by third parties two employees were injured in each case

#### **Fleet**

380 Trucks 290 Sprinter, Vans

#### **Equipment**

- 53 Truck mounted attenuators
- 10 Fully automated traffic cone management systems
- 54 Truck mounted traffic cone work baskets
- 15 Intelligent mobile information systems
- 209 lane closing trailers
- 76 overhead warning trailers with variable message signs
- 169 LED warning trailers with variable message signs

Total Damage TMA and Signalising Trailers						
2018	2019	2020	2021	2022		
18	8	14	19	15		

### **ASFINAG - SAFETY PERFORMANCE INDICATORS "DASHBOARD"**

	Goals	2019	2022	2030	achievements
MAIN GOAL	Fewer than 1 person killed per billion kilometres driven	1,1	1,1	1,0	goal open
SUB-GOALS	Fewer than 10 accidents with persons killed or seriously injured per billion kilometres driven	10,9	10,2	10 (2020 ongoing)	goal open
	Fewer than 70 accidents with personal injuries per billion kilometres driven	69,0	63,0	70 (2020 ongoing)	on track
	Number of annual accident black spots should be below 30	18	18	30 (2020 ongoing)	on track
	Vast majority (at least 85%) of the drivers should always opt for speeds below the speed limit	80,2%	80,5%	85%	goal open
Partial goals and key figures	Tunnel accidents with a larger number of people involved should be avoided altogether	(0) 4	(1) 5	(0) 0	goal open
	With regard to traction and evenness, the so-called functional value should be better than 5 on at least 97% of the roads	99,6%	98,9%	>97%	on track
	No deaths in cases of collisions with trees next to the road ("roadside management")	0 (2019) 4 (2018)	2	0	goal open
	No frontal (head on) collisions	34	15	0	not on track
	No truck accidents caused by technical defects	18	18	0	goal definition missing
	The number of accidents related to alcohol should sink below 80	116	131	80	goal open
	Relation of serious rear-end collisions	35%	38%		not on track
	99% seatbelt rate with passenger car drivers	98,5%	97,5% (2023)	99%	goal open
	100% seatbelt rate with truck drivers	79,9% (2020)	69,9% (2023)	100%	not on track

### OUR APPROACH TO INCREASE ROAD SAFETY AND EMPLOYMENT PROTECTION

We invest in great ideas/prototypes to keep our employees safe

Newest developments in safety equipment for work-zones and maintenance procedures are made of our own employees

We learn from around 10.000 lane closures yearly – continuous improvement is ongoing

Our Quick Response Incident Management, Road Patrol and Road Services are working highly efficiently to open the highway quickly

Winter Service is the key – we are proud to be the actual European Snow Plow champion ☺



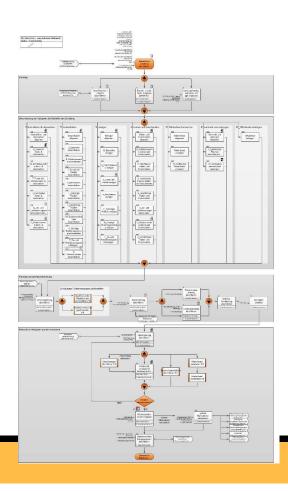
## Best Practices and Training - ASFINAG Info Screen at the O&M Facilities



Movies
Processes
In-house training
Exam Multiple Choice
External training lectures





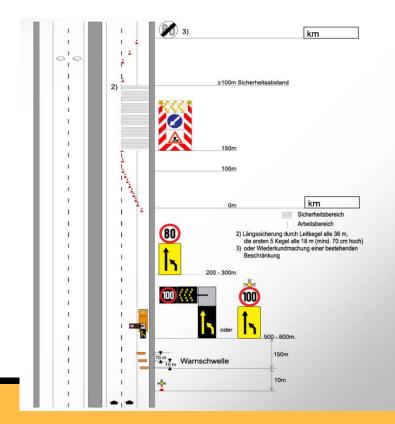


# Training Approach on Lane Closure in front of a Road Work Zone

Workplaces of shorter duration with outer lane blockade

# Planning, Construction and Maintenance of Roads:

- Mandatory RVS (the code covering the planning, construction and maintenance of roads)
- uniform Quality Level
- high level of both safety and quality for the user of the infrastructure

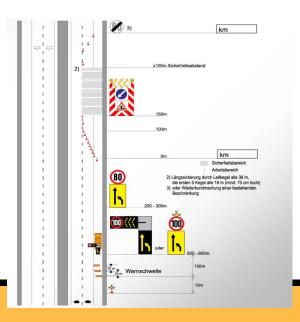


# Training Approach on Lane Closure in front of a Road Work Zone

## Rumble Strips / Automatic Pick







## Field Trial Pick and Drop





## Focus Campain – Visual Billboards









#### Slogan:

"My mother/ father works for you. Thank you, for paying attention."

Usage of the Hashtag

#dankedassduaufpasst

#thankyouforpayingatte ntion

# Intelligent road work zone equipment - road closure with digital resources

Intelligent traffic cones and adapted warning trailers send their positions and thereby optimize the data of the construction site management system.













### **Best Practices and Lessons Learned**

### **Staff Education, Team Work and Cooperation**

ASFINAG wide concept regarding trainings

Interactive Training Movies and Multiple Choice Exams

Clear instructions to employees, work wear is a must

Make yourself visible

### Resources, their availability and reliability

Shock Absorbers, Rumble Strips, etc. ... small investments - high improvements

Try new things and equipment, pilot and field tests, convince employees

Nevertheless beyond all technology and systems, the training and improvement of skills of the personal is from exhaustive importance for a successful and safe road work zone management.



### Thank you very much!

## For any questions or further information I'm at your disposal.

David Kollenhofer, MBA

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Departement of Road Operation and Maintenance

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