

# National experiences in road infrastructure safety management: Austria

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Trans-European North-South Motorway (TEM)

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# Content

- Road Safety Impact Assessment in Austria
- Road Safety Audit
- Road Safety Inspection
- Certification of Auditors / Inspectors
- Network Safety Management

# Implementation - Timetable

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
RIA				Aug. 2005 National Law I			Nov. 2008 EU-Directive			July 2011 Implementation in Austrian Law				
RSA	2002/03 Pilot Projects		Aug. 2004 Handbook		Sep. 2006 Guideline									
RSI		2003/04 Pilot Projects				Mar. 2007 Guideline		Dec. 2009 Handbook						2015 Revised Handbook
Certification								July 2009 Guideline Nov. 2009 First course			Mar. 2012 First certificates			
NSM										Jan. 2011 1st NSM for Motorways				

Treatment of high accident concentration sections and data management were already implemented for a long time

# Implementation

- Austrian Road Safety Programme 2002-2010: RSA was mentioned and proposed
- January 2010: Asfinag Road Safety Programme: RSA in 4 stages, audits of bigger construction zones
- January 2010: Asfinag Road Safety Programme: RSI - at least 150 km/year of Asfinag roads are inspected
- Austrian Road Safety Programme 2011-2020: regular implementation of RSI on provincial roads is proposed
- RSA and RSI are mentioned in several regional Road Safety Programmes as well

# Road Safety Inspection – Handbook 2009

<i>Highway Nr. ZZ, km XX – km YY</i> <i>Proposed measures Road Safety Inspection</i>				Safety relevance:			
					High priority		Medium priority
Nr.:	Locali- zation	Problem / Deficiency	Proposed measure	Expected improvement	Application possible		
					short term	medium term	long term
1.	Direction 1, km XX	Unprotected tunnel portal	Installation of crash cushion in front of the portal	Lowering of severity of accident in case of running- off	x		
2.	Direction 1, km YY	Unprotected wall at the side of the road	Installation of guardrails	Lowering of severity of accident in case of running- off		x	
3.	Direction 1, km ZZ	Directional sign is hidden by plants	Trimming of the plants	Better information for drivers	x		
4.	Direction 2, km UU	Lack of lateral guidance due to planting (hidden reflectors)	Trimming of the plants	Improvement of lateral guidance and of sight distance in the inner curve	x		
5.	Direction 2, km UU	Many accidents during wet conditions, possible lack of drainage Road runs through a short section of wood	Further investigation if friction is sufficient; if not, improvement of friction Cutting of plants	Prevention of accidents at wet conditions		x	

# Road Safety Inspection – Handbook 2015

Assessment of the possible accident consequences →	low	moderate	severe
↓ Assessment of the accident risk			
low	X		
moderate			
high			

# Road Safety Inspection – Handbook 2015

<b>Road Safety Inspection Measures Proposals</b>	Legend:	<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span>	High safety relevance	<b>No. 1</b>
		<span style="background-color: orange; width: 20px; height: 10px; display: inline-block;"></span>	Moderate safety relevance	
		<span style="background-color: yellow; width: 20px; height: 10px; display: inline-block;"></span>	Low safety relevance	
<b>Road / section</b>	<b>Direction</b>	<b>Location</b>		
Road A / km 14.50–km 18.85	1	km 16.45		
Problem / deficiency	There is neither an end piece nor an impact absorber at the end of the concrete divider island; a collision with the blunt end of the concrete divider is possible			
Proposed measure / expected improvement	Install an impact absorber; this will reduce the consequences of a collision			
Assessment of the accident risk	moderate	Obstacle in the divider island, two accidents with personal injury in the last three years		
Assessment of possible accident consequences	severe	Inflexible, fixed obstacle		
Assessment of implementation timeframe and safety relevance	Short term	Medium term	Long term	
	x			

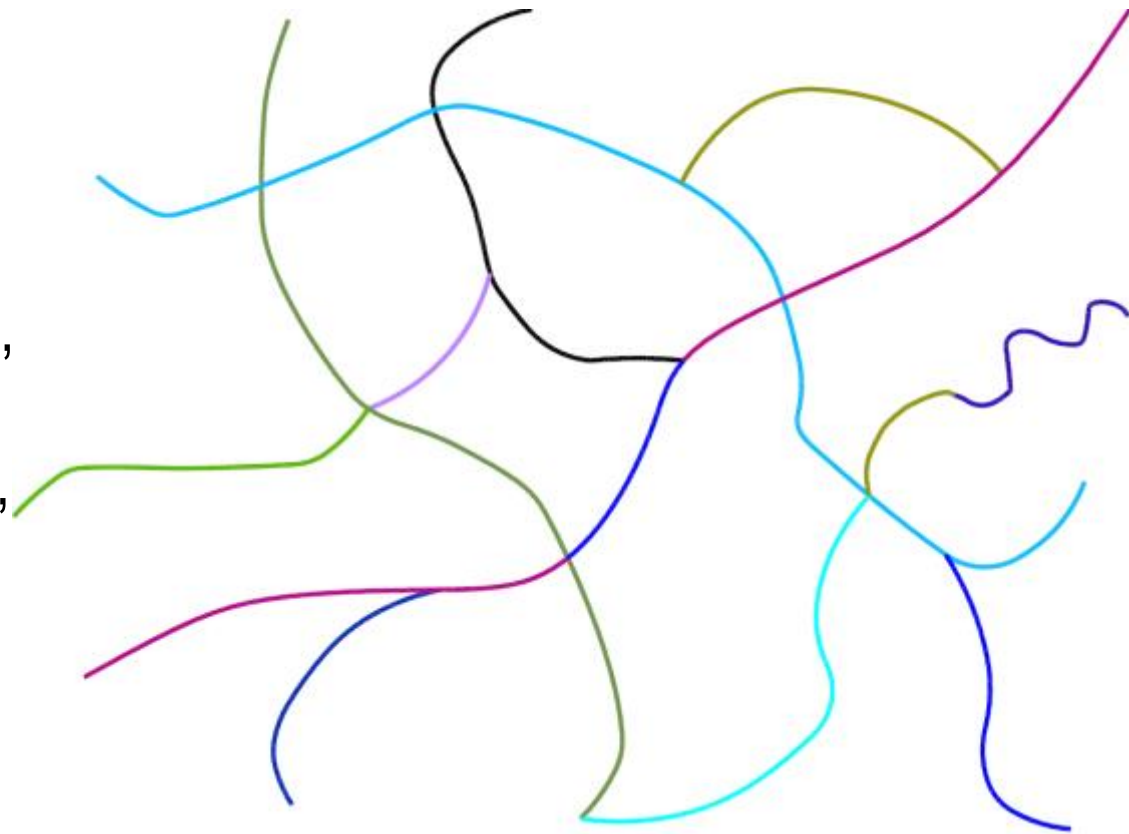


Assessment of the possible accident consequences →	low	moderate	severe
↓ Assessment of the accident risk			
low	X		
moderate			
high			

(Fictitious example)

# NSM – Network Safety Management

- Definition of homogenous sections in the network  
(min. length 3km, traffic, heavy traffic, alignment, slope, number of lanes)

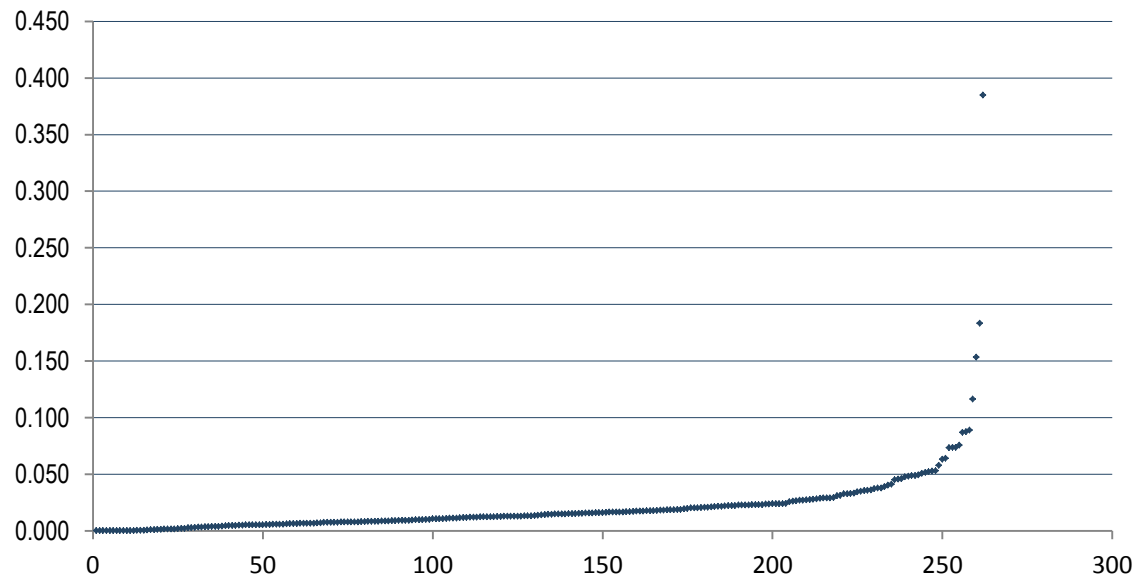




# NSM – Network Safety Management

- Classification of sections => ranking of safety potentials, prioritization (calculation of accident rates, accident cost rates – potential?)

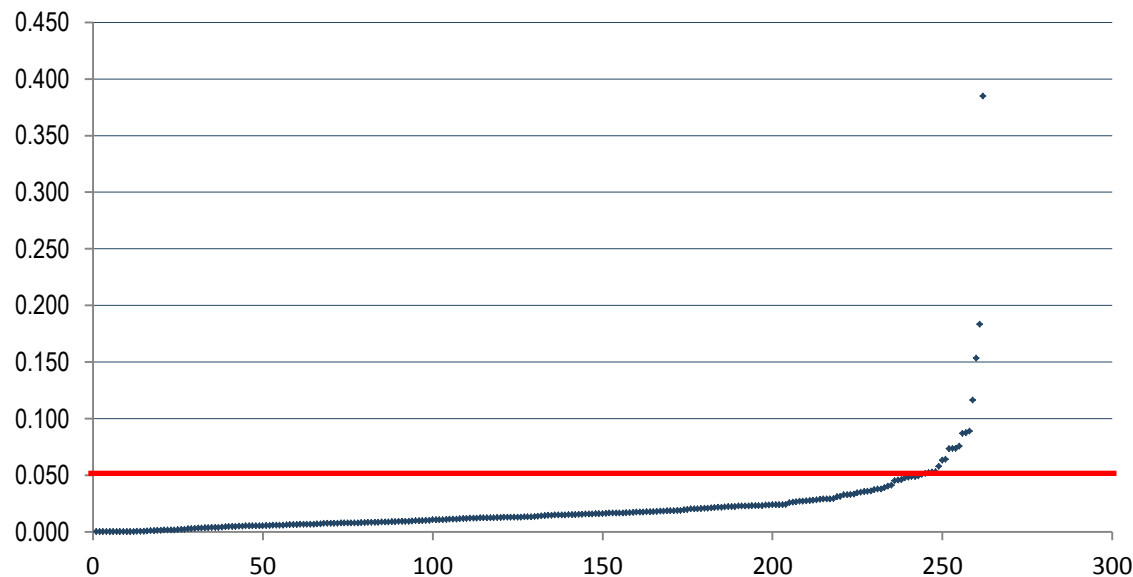
**ACR 2009-2011**



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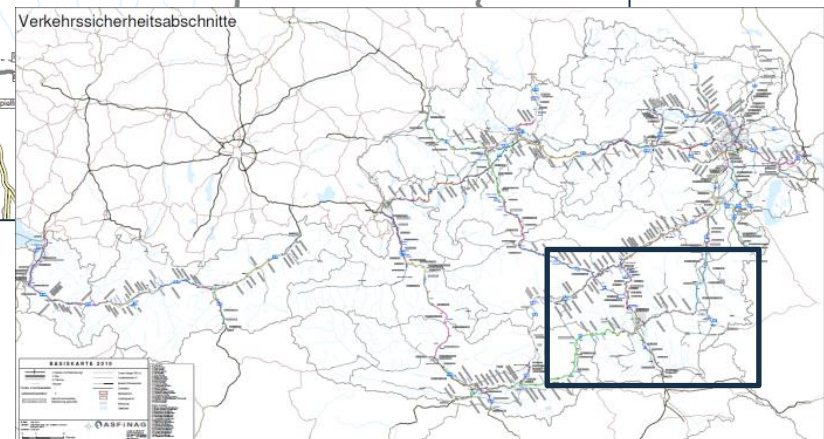
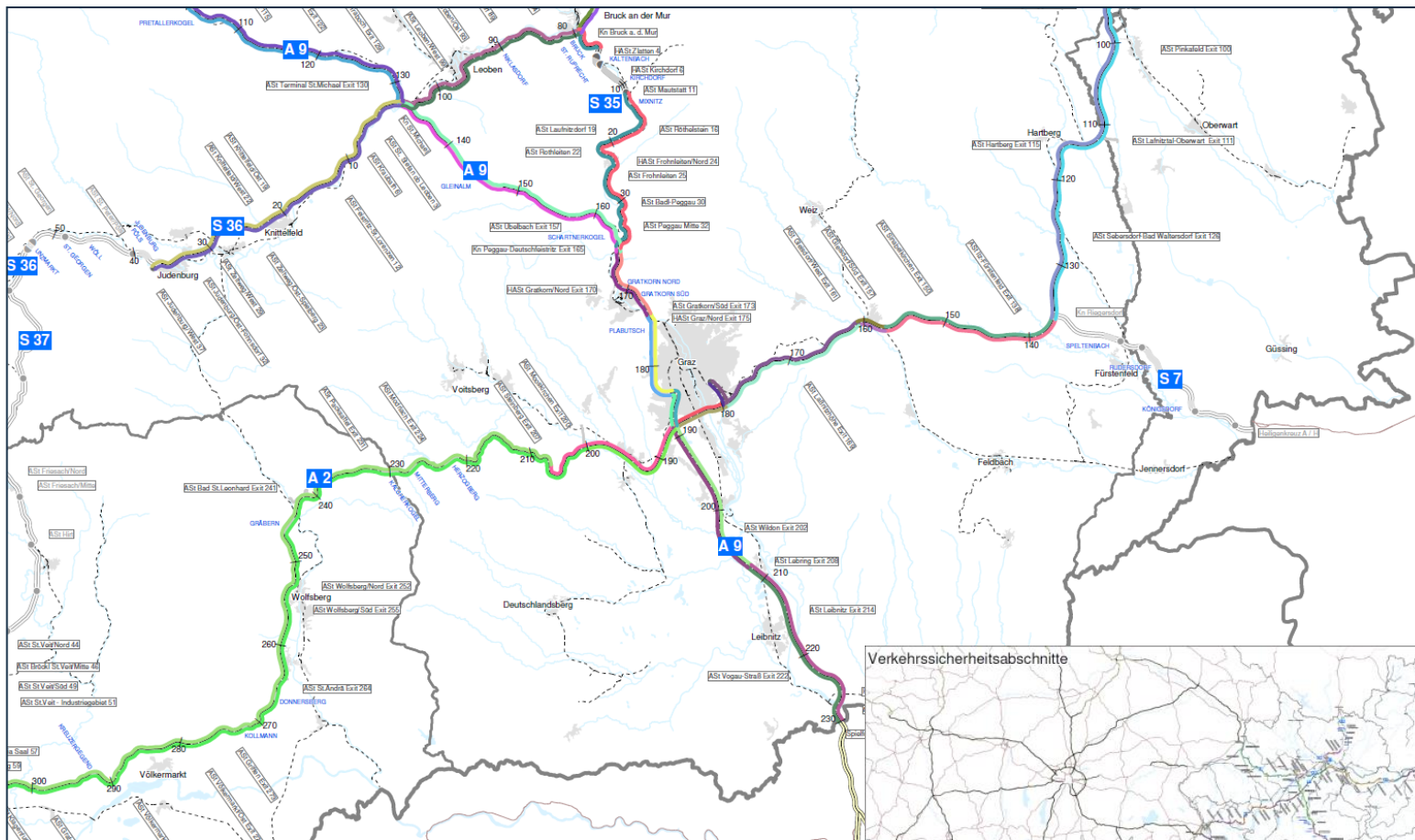
**ACR 2009-2011**



ACR of NSM-sections are calculated every year for Austrian motorways

# NSM – Network Safety Management

Example:  
Austrian  
Highway  
network



Source: BMVIT

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# Thank you!

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