

ПЕТА НАЦИОНАЛНА КОНФЕРЕНЦИЯ ПО ПЪТИЩА, септември 2012 г., Несебър
FÜNFTE NATIONALE STRASSENBAUKONFERENZ, September 2012, Nessebar

WhiteRoads EU Project

A + approach to road safety



Asociación
Española de la
Carretera



José Díez
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European Union Road Federation



European Union Road Federation

- Non-profit association which coordinates the views of Europe's infrastructure road sector
- The ERF acts as a platform for dialogue and research on mobility issues
- Founded in 1998 and representing stakeholders in the field of road infrastructure





European Union Road Federation

The ERF is divided in 3 Programmes:

- Road Safety
- Sustainability
- Intelligent Roads and Financing

Each Programme develops different activities in Policy and Research (EU Projects) which are coordinated by Working Groups assisted by the Secretariat.



WhiteRoads is one of the EU Projects
currently driven by the ERF





CONTENT

Background

- Road Safety in our society
- WhiteRoads Project Rationale

The Project

- Traffic accident data: collection, evaluation, analysis
- Challenges and difficulties
- Definition of White Spot and number of WR in EU countries
- Case Study: SPAIN
- First conclusions



Background

Road Safety in our society

Every year only in the EU there are more than **30.000** road fatalities and **1,5 millions** injuries

Different initiatives aim at improving road safety:

- **EU:** Road Safety Action Programme 2011-20
- **UN:** Decade for Road Safety 2011-2020

Road accidents have a **negative social, health and economic impact**

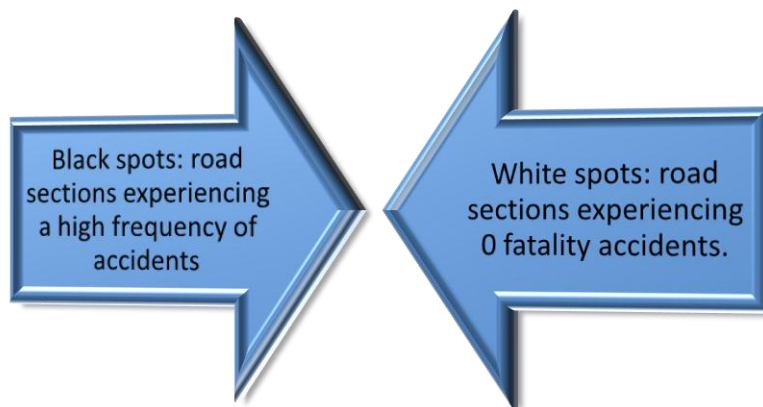


Background

WhiteRoads Project Rationale

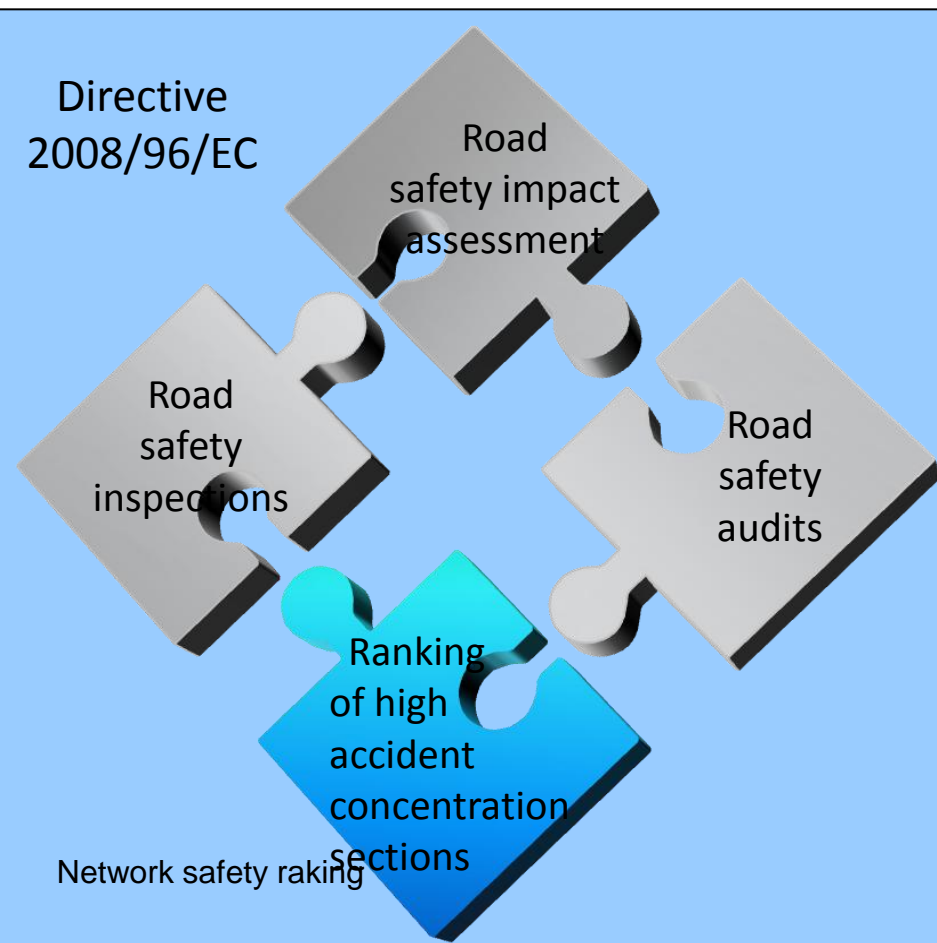
Partners: European Union Road Federation & Spanish Road Association. Cofinanced by the EC

Objective: development of the **first + approach** to improve road safety from the infrastructure perspective





Background



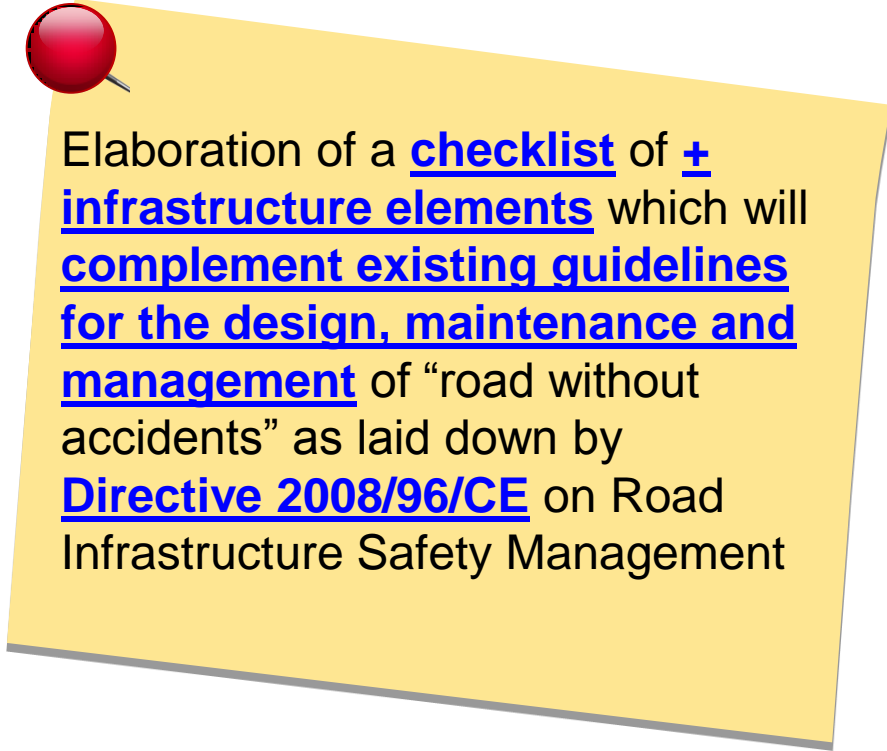
WHITEROADS:
Starting from the assumption that more useful information can be obtained analysing road sections with low road accident frequency, the project aims at identifying the best road sections in Europe and comparing them to the adjacent stretches characterised by a higher volume of accidents.
THE FIRST POSITIVE APPROACH TO ROAD SAFETY FROM THE INFRASTRUCTURE PERSPECTIVE





Background

Result: the comparative analysis will enable the Project to highlight the factors which can reduce accident frequency:



Elaboration of a checklist of + infrastructure elements which will complement existing guidelines for the design, maintenance and management of “road without accidents” as laid down by Directive 2008/96/CE on Road Infrastructure Safety Management

The Project

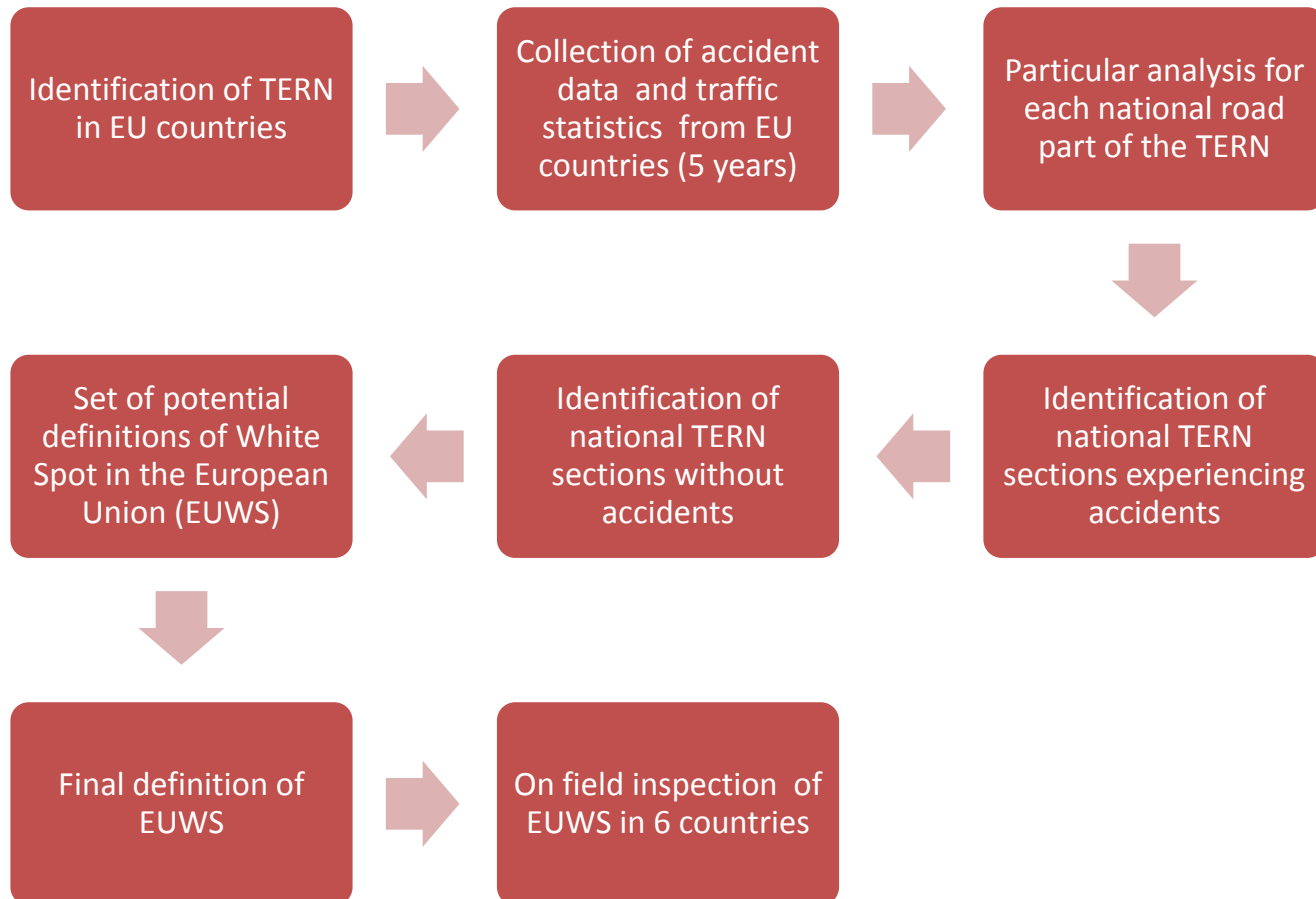


Life Period: May 2010 – February 2013



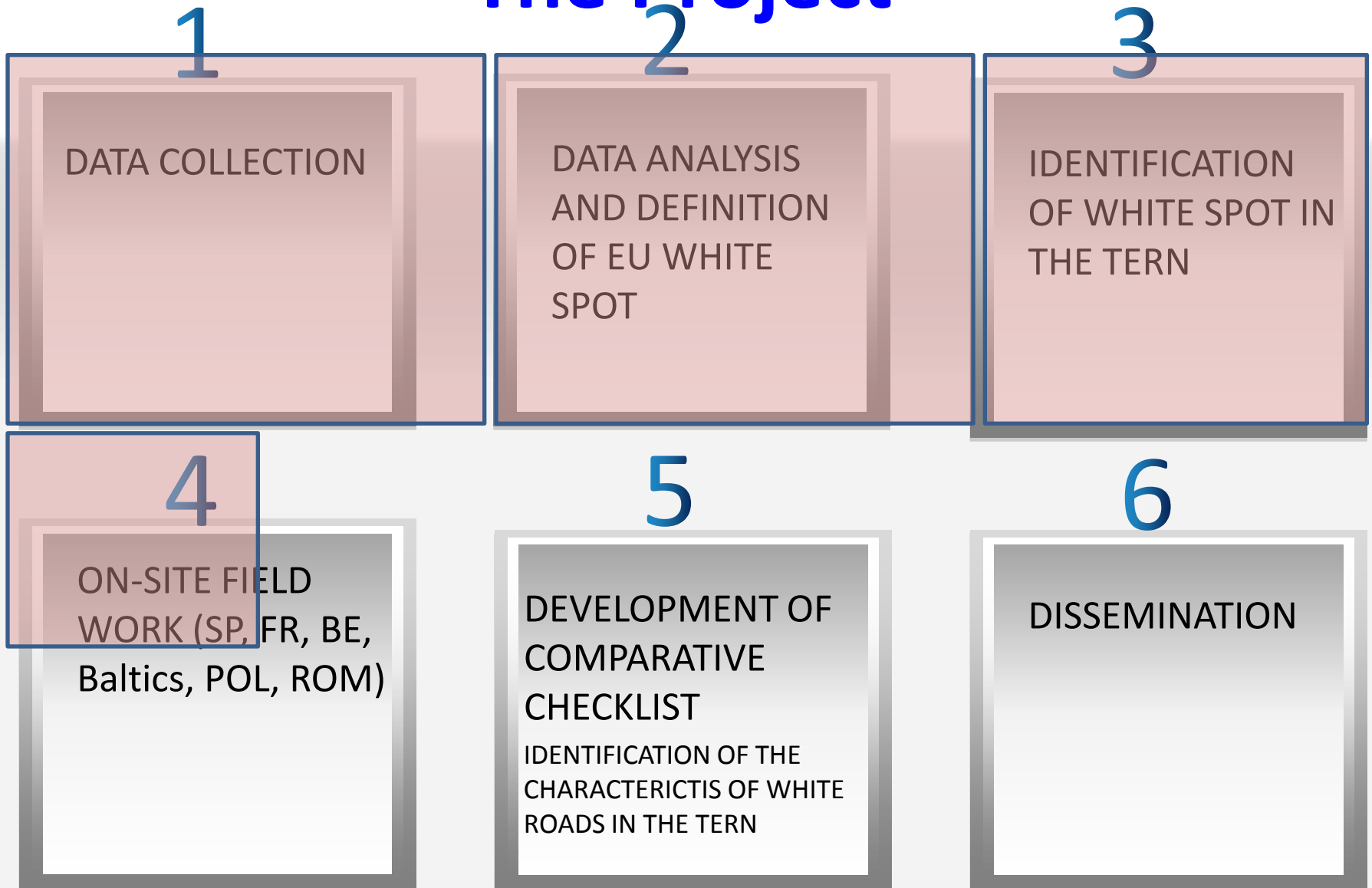
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Traffic accident data: collection, evaluation and analysis





The Project






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Challenges



Collection of road accident data and traffic statistics from 27 member states during the last 5 years

Evaluation of the data received and analysis of road sections of the TEN-T that in equal traffic flow density and similar road infrastructure have registered no accidents during the last 5 years



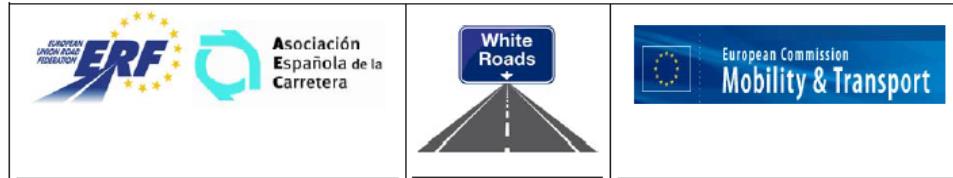
Analysis and location of accidents which happened only on the TEN-T road network for each member state





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Questionnaire



1. Entity profile

- Contact details (name, surname, position, email, telephone)
- Full name of the entity, short name (acronym), country

2. List of Trans-European Road Network in your country¹

3. National definition of fatal accident and road injury

4. Accident database in your country during the period 2004-2009²

- Road identification (number, name)
- Accurate location of the accident (km and direction)
- Date of accident (day-month-year and time)
- Type of road (motorway, single carriageway)
- Number of serious injuries and fatalities in each accident
- Type of vehicles involved in the accident
- Description of existing infrastructure and equipment placed in the spot where the accident occurred: lighting, barriers, vertical signs, road markings, state of surface.

5. Traffic flow of all the roads in the country, specifying type of vehicle, for 2004-2009, both included³



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Questionnaire

- Graphic Table 1

Number	Road	Location	Date	Type of road	Killed	Serious injuries	Type vehicle involved (heavy, car, motorcyclist, cyclist, pedestrian, etc)	Existing infrastructure and equipment placed in the spot where the accident occurred (lighting, barriers, vertical signs, road markings, state of surface, etc)
1	N-340	Km 17.4	3/7/2008 11:10 am	Single carriageway	1	3	Light vehicle Motorcycle	Safety barrier Road marking



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Questionnaire

- Graphic Table 2

Road	Type	Section (control)	Average Daily traffic 2004	% of heavy vehicles 2004	% of PTW 2004
<i>N-340</i>	<i>Single carriageway</i>	<i>Km 20</i>			



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Traffic accident data: period covered and size of the analysis

Country	Number of accidents	Kms /TEN-T covered
Austria	1754	1823,7
Belgium (Flanders)	2328	990,1
Belgium (Wallonia)	5852	887,5
Bulgaria	1163	2735
Cyprus	234	183,6
Denmark	1072	935,8
Slovakia	184	416,7
Slovenia	401	417
Spain	59924	11637,7
Estonia	1455	1017,5
Finland	2996	4188,5
France	27986	16317,3
Greece	508	753,7

Period covered: 2005-2009, both included, in most EU countries. Only in Bulgaria accident data was only available for 2007-2009.

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Traffic accident data: period covered and size of the analysis

Country	Number of accidents	Kms /TEN-T covered
Netherlands	2218	3112,6
Hungary	14168	2216,7
Italy	39885	6076,2
Ireland	3567	2492,5
Latvia	11092	1755,6
Lithuania	1392	811,2
Luxembourg	73	91,2
Poland	14300	4339,5
Portugal	1058	2860,6
Sweden	1230	5729,2
Czech Republic	1488	2709,1
United Kingdom	43941	7169,1
Romania	7899	3576,3
TOTAL	248.168	85.243,9



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Difficulties



Most of the countries *do not have an official list* of Trans European Road Network

Some countries *cannot provide accident data* for analysis (although all privacy concerns are respected). This is the situation of Germany



Some countries *do not have information about type of vehicle involved* in accidents, which introduces difficulties in the analysis for road safety purposes



Countries like United Kingdom, Finland, Ireland, Sweden and Czech Republic refer the accidents in *coordinates "x-y" or GPS, which do not correspond to the road network* (classified in number of road and kilometre). This circumstance makes the analysis more complicated and the necessity to locate accidents using a special software.



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Difficulties



Some countries provide accident data in road sections of 1 km long without specifying the exact point where the accident happened. Thus, this introduces a different analysis for these countries (Italy and Denmark)



Information related to traffic flow or vehicles involved in the accident is not available in many countries

The lack of clear information, statistics and correlation between accidents and road sections is extremely negative for road safety analysis from the infrastructure point of view. Not only for the WhiteRoads Project, but also for black spot management works or other research studies





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Definition of White Spot and number of WR in EU countries

European White Spot (EUWS) is defined as a road section, of at least 15 consecutive kms long, where no fatality accidents have happened during the last 5 years considered

	EUWS 15 km long
Number of EUWS	984
Total km of White Roads	77.944,2
% of white roads over total TERN	40%

TOTAL Km analyzed

196.884,7



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Number of WhiteRoads in different EU countries

COUNTRY	EUWS (15 Km)	% over national TEN-T
Austria	20	27%
Belgium (Flanders)	8	15%
Belgium (Wallonia)	7	16%
Bulgaria	40	40%
Cyprus	3	36%
Denmark	18	40%
Slovakia	5	28%
Slovenia	5	51%
Spain	142	37%
Estonia	11	22%
Finland	79	70%
France	242	62%
Greece	4	10%

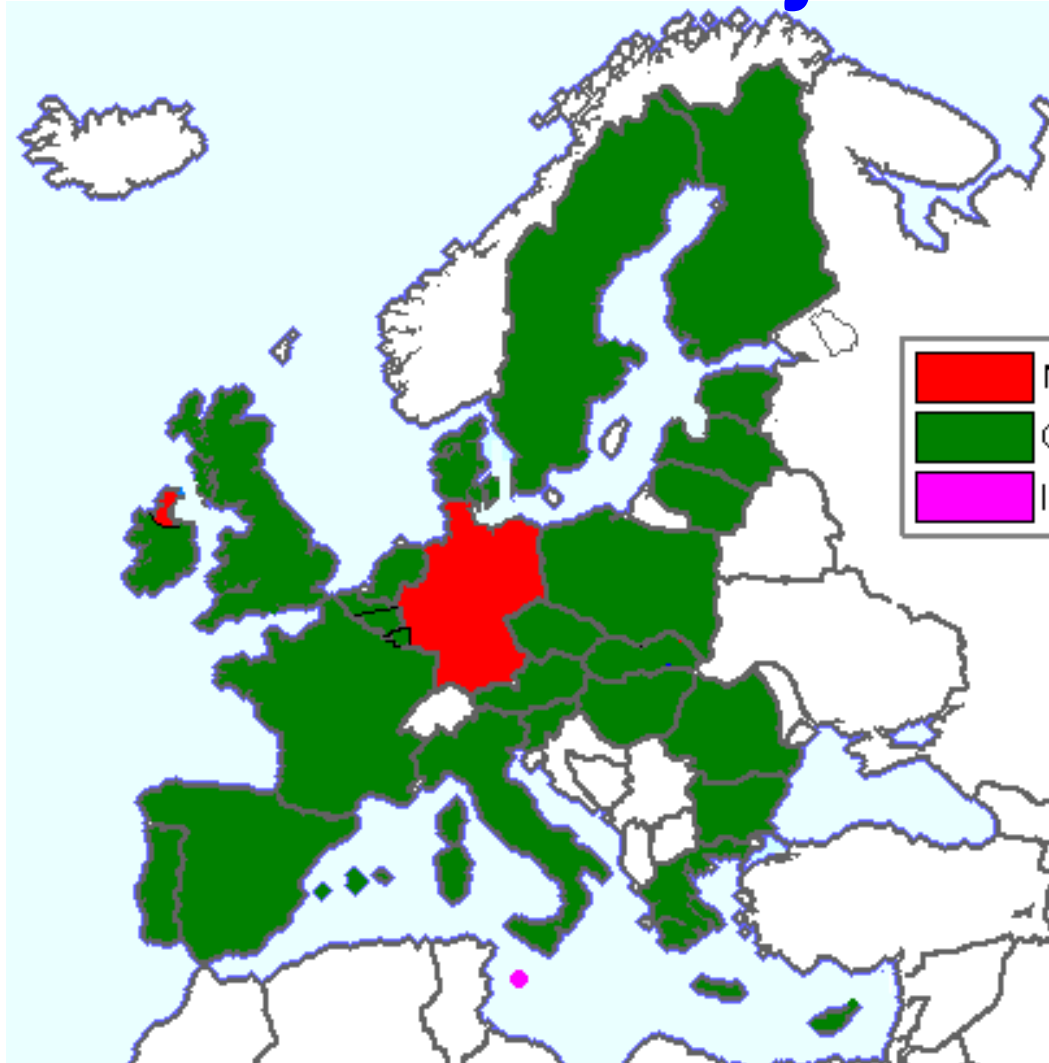


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COUNTRY	EUWS (15 Km)	% over national TEN-T
Netherlands	59	56%
Hungary	18	16%
Italy	45	16%
Ireland	42	50%
Latvia	23	31%
Lithuania	1	2%
Luxembourg	1	22%
Poland	9	5%
Portugal	46	48%
Sweden	106	89%
Czech Republic	26	42%
United Kingdom	17	18%
Romania	7	7%



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Germany has not provided data for the analysis

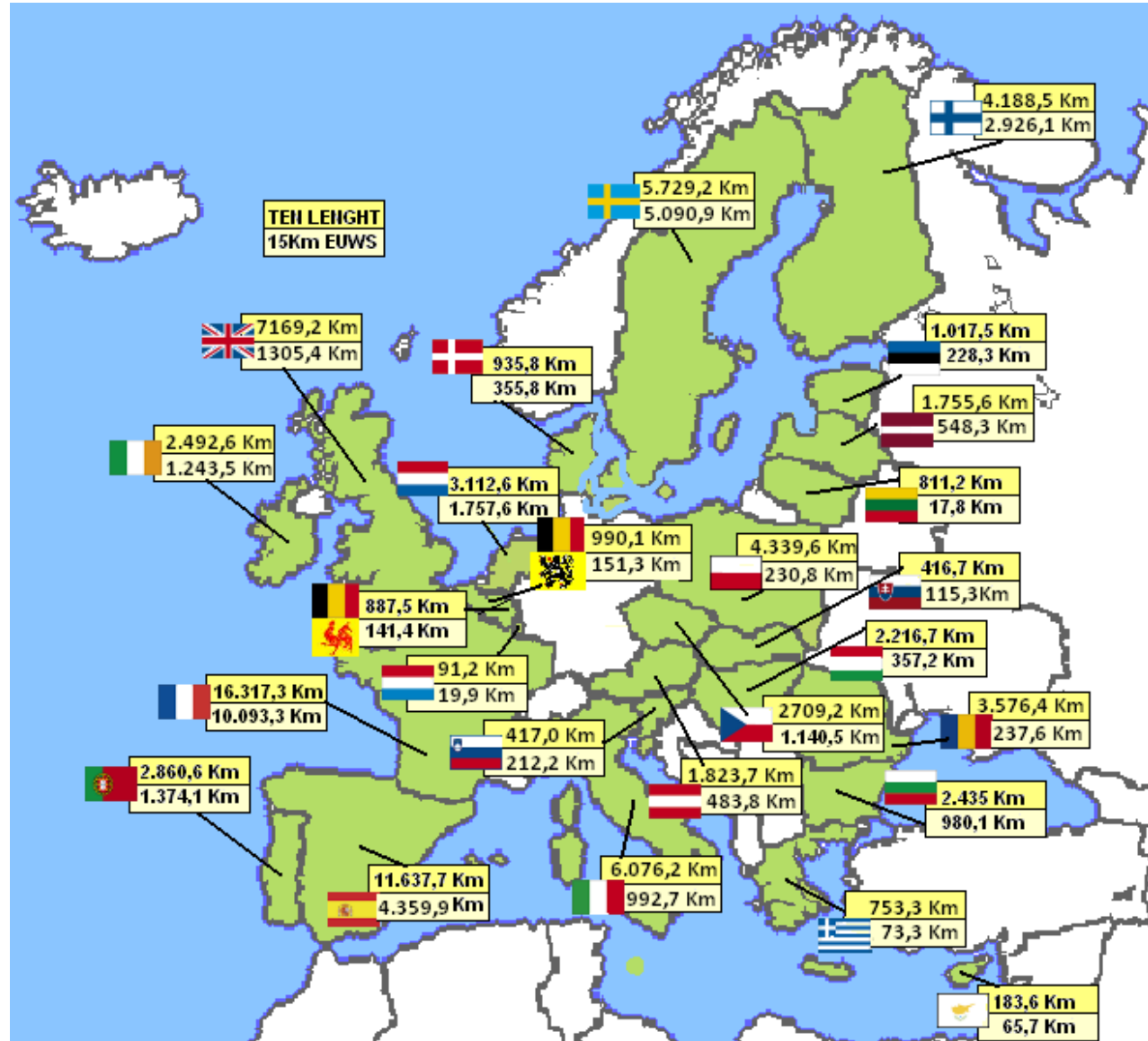
No data
Completed
Insufficient data

Malta: no sufficient data for the analysis



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Current status





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Next steps:





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Case Study: SPAIN



TEN-T: 11.638 km

69 roads

59.924 accidents

Between 2004-2009



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Case Study: SPAIN

ROAD	length analyzed (Km)	% of EUWS					Road lenght considered				
		5 Km EUWS	10 Km EUWS	15 Km EUWS	20 Km EUWS	25 Km EUWS	5 Km EUWS	10 Km EUWS	15 Km EUWS	20 Km EUWS	25 Km EUWS
A-1	230,1	51%	34%	8%	0%	0%	116,9	78,9	17,7		
A-10	29,0	72%	51%	0%	0%	0%	21,0	14,9			
A-11	59,0	99%	99%	78%	78%	43%	58,6	58,6	46,2	46,2	25,1
A-15 (pK0 - pK 13,349)	13,3	100%	100%	0%	0%	0%	13,3	13,3			
A-15 (pK113,5 - pK 155,8)	42,3	83%	42%	42%	0%	0%	35,2	17,8	17,8		



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Case Study: SPAIN

	Road sections without fatality accidents			Road sections without fatality and injury accidents		
	EUWS 15 km long	EUWS 20 km long	EUWS 25 km long	EUWS 15 km long	EUWS 20 km long	EUWS 25 km long
Number of EUWS	142	85	52	44	28	19
Total km of White Roads	4375	3331	2660	1296	1083	919
% of white roads over total TERN	38%	29%	23%	11%	9%	8%



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Case Study: SPAIN







First Conclusions

- Collection of data and statistics is never an easy task. In our case, the delay has been of one year
- WhiteRoads Project has achieved a further step in analysing national statistics of 248.168 accidents and 85.243 Kms
- Detailed evaluation will permit to present concrete results for every member state
- The Project will provide complementary checklist and guideline to improve design, construction and management of the TEN-T
- Innovative comparative checklist will give the EC the possibility to transform it into legislation to improve road safety



THANKS FOR YOUR ATTENTION !

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