



# ROAD MARKING IN POLAND WITH REFERENCE TO THE ROAD CATEGORY.



## Deconsolidation of the Roads Administration

Variety of requirements  
concerning road marking, dependently  
on individual Road Administrator.

Proposal of standardisation (unification)  
of road marking system.

Referring the situation in Poland to the  
situation in other european countries –  
Questions and answers session.



# NATIONAL ROADS

Main roads in Poland:

- transit roads

- roads connecting big cities,  
governed centrally by called  
for this purpose state institution:  
General Directorate for National  
Roads and Motorways.



# REGIONAL ROADS

roads running within  
Voivodeship,

roads connecting the most  
important cities located within  
Voivodeship,

roads administrated by  
Voivodeship self-government.



# DISTRICT ROADS

roads running within District,

roads connecting the spots of  
local meaning,

roads administrated by  
district self-government.



# COMMUNITY ROADS

roads of local meaning,

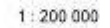
roads connecting the  
surrounding spots,

roads administrated by  
local government

# POLSKA

mapa administracyjno-drogowa  
skala 1:600 000





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# CLASSIFICATION OF ROADS IN POLAND

	Category of road	Estimated roads length [in km]
1.	National roads	18 100
2.	Regional roads	29 600
3.	District roads	126 600
4.	Community roads	186 000
	<b>In total:</b>	<b>360 300</b>



# CLASSIFICATION OF ROADS IN POLAND

The consequence of deconsolidation of roads administration in Poland is polish road marking system which is not uniform as it depends on individual Road Administrator.



What is the situation in other  
european countries? Do  
they have similar  
difficulties?



The result of the above  
presented Road Administration  
system – diverse range of  
roadmarking systems



# NATIONAL ROADS

## RANGE OF ROAD MARKING

New roads

(just constructed roads and the roads after renovation of the surface):

- full marking range:

edge line and centre line (separating streams of traffic flow).



28.10.2005



# NATIONAL ROADS

## RANGE OF ROAD MARKING

Remarking (renovation of road marking) :

- centre line ,

renovated in 50-100%, depending on the region

- edge line (not on the all length)

renovated in 20-80%, depending on the region

The range of remarking depends on following factors:

- on budget

- on the appraisal of the quality of existing marking





# What is the range of road marking systems in other european countries?

What are the criteria of qualification of roads for remarking after warranty period ?

What is the range and the percentage of remarkings after warranty period?



# REGIONAL ROADS

Diverse range of applicable road markings for different road widths:

WIDTH OF ROAD	RANGE OF ROAD MARKING
6 METERS AND ABOVE	EDGE LINE AND CENTRE LINE
BELOW 6 METERS	EDGE LINE







# REGIONAL ROADS

How it is in other european countries? Does the road marking change depending on the road width ?



# DISTRICT AND COMMUNAL ROADS

Road marking is not obligatory.



# DISTRICT AND COMMUNAL ROADS

Are there any public roads in other  
european  
countries where the road marking  
is not obligatory?



# ROADMARKING SCHEDULE IN PERCENTAGE

	Category of road	percentage %	
1.	National roads	5,02	ROAD MARKING IS OBLIGATORY
2.	Regional roads	8,22	ROAD MARKING IS OBLIGATORY
3.	District roads	35,14	ROAD MARKING IS NOT OBLIGATORY
4.	Community roads	51,62	ROAD MARKING IS NOT OBLIGATORY
	<b>In total</b>	<b>100,00</b>	



On the 13,24% of road system in Poland road marking is obligatory.

On the 86,76% of road system in Poland road marking is not obligatory.



# RECOMMENDATIONS

The range of road marking should depend neither on the road type nor on the Administrator but exclusively on the road width.



# TEMPORARY ROAD MARKING

Temporary road marking:  
obligatory marking for road  
works areas –Investment  
boom in Poland.



Generally the temporary road marking is not applied, only in some cases temporary roadmarking yellow tape is used.











The roads on which road works are held and the traffic is allowed stays public roads. Due to this fact road marking on such road is obligatory.

The areas of road works are particularly danger areas and due to this fact should be marked with the particular care.



What is the range of  
temporary road marking in  
other countries?



# WARRANTY REQUIREMENTS

Polish regulations provide different road marking parameters (retroreflectivity) for different lifetimes (different periods after application)

# PARAMETRY OZNAKOWANIA POZIOMEGO

Tablica 5. Zbiorcze zestawienie wymagań dla oznakowań na pozostałych drogach nie wymienionych w tablicy 4

Lp.	Właściwość	Jednostka	Wymagania	Klasa
1	Współczynnik odbłasku $R_L$ dla oznakowania nowego (w ciągu 14 - 30 dni po wykonaniu) w stanie suchym barwy: – białej, – żółtej tymczasowej	$\text{mcd m}^{-2} \text{ lx}^{-1}$	$\geq 200$	R4
		$\text{mcd m}^{-2} \text{ lx}^{-1}$	$\geq 150$	R3
2	Współczynnik odbłasku $R_L$ dla oznakowania eksploatowanego od 2 do 6 miesięcy po wykonaniu, barwy: – białej, – żółtej	$\text{mcd m}^{-2} \text{ lx}^{-1}$	$\geq 150$	R3
		$\text{mcd m}^{-2} \text{ lx}^{-1}$	$\geq 100$	R2
3	Współczynnik odbłasku $R_L$ dla oznakowania suchego od 7 miesiąca po wykonaniu barwy białej	$\text{mcd m}^{-2} \text{ lx}^{-1}$	$\geq 100$	R2



Maintenance of retroreflectivity factor at required level at the end of warranty period ensures suitable safety.

The road marking Executor has to apply such marking, which ensures the maintenance of all parameters at required level during whole warranty period.



# RECOMMENDATIONS

Introduction of uniform road marking parameters for whole warranty period.



# CONCLUSIONS

Summary of conclusions of  
the above presentation



# RANGE OF ROADMARKING

The range of road marking should depend neither on the road type nor on the Administrator but exclusively on the road width.



# RANGE OF ROAD MARKING

Traffic regulations are the same for all types of roads and the state of using different road marking for different road types does not make any sense

The local road can't be less safe than the transit one so it should be marked according to the same rules.

Drivers can expect the same efficient marking on each type of road.



# ROAD MARKING FOR ROAD WORKS AREAS

The roads on which the road works are held and the traffic is allowed, stay public roads. Due to this fact the road marking on such roads is obligatory.

The areas of road works are particularly dangerous and regarding this fact should be marked with particular care.



# REMARKING RULES

After warranty period road marking should be completely renewed.

The alternative solution – long-term maintenance contracts for road marking.



# REQUIRED PARAMETERS

Introduction of uniform road marking parameters for whole warranty period.



19.09.2007



# QUESTIONS

What road classification systems are used in other european countries?

What is the range of road marking applied in other european countries?

What are the criteria of qualification of roads for remarking after warranty period?

What is the range and percentage of remarking after warranty period?



# QUESTIONS

Does road marking in other countries change depending on the road width?

Exist in other countries public roads on which the road marking is not obligatory?



# QUESTIONS

What is the range of temporary road marking in other countries?