



Support for implementing measures for the South East Europe Core
Regional Transport Network Multi Annual Plan 2008-2012
EuropeAid/125783/C/SER/MULTI



WYG International part of the WYG group
creative minds safe hands



Project Office: Omladinskih Brigada 1/5th floor, 11070 Novi Beograd, Serbia
Tel: +381.11.3131799 / Fax: +381.11.3131800 / E-mail: RWRRSasecretariat@seetoint.org

SAMPLE ROAD SAFETY INSPECTION REPORT

Annex 3 to Road Safety Inspection Guideline

(FINAL)

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WYG International Limited, Newstead Court, Little Oak Drive, Sherwood Business Park, Annesley, Nottinghamshire NG15 0DR
Tel: +44 (0)1623 684 500 Fax: +44 (0)1623 684 545 Email: enquiries@wyginternational.com www.wyg.com

WYG International Ltd Registered in England Number: 3195485 Registered office: Armdale Court, Otley Road, Headingley, LS6 2UJ

Sample Road Safety Inspection Report

**(for confidentiality reasons
the specifics of the project are not presented)**

Road:

**Section from to (about km).
(GPS: from My Loc. ... to My Loc. ...)**

Photograph or site map of location or section

Date:

ddd/mmm/yyyy

A: GENERAL PROJECT DATA:

The National Highway M ... (E ...) is the road which connects the and
(total length of the road from to is about km).

The inspected road section starts from GPS dot My loc. ...* (.....) and ends at GPS dot
My loc. ... (.....).

The section is an one carriageway 2-lane road.

There are plans to build up new motorway from to (new road is
foreseen in next 5 years).

Inspected by:

Inspection Team Leader: Dipl.-Eng. Lutz Pfeiffer, Road Safety Auditor

Assisted by: PhD Dejan Jovanov

Inspection Team Members:

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** Note: GPS locations are in detail described in Annex 1.*

Detailed project data:

Municipality (Commune):

Road category: National Highway ("magistralni put")

Road Number/section: M ... (E ...), section from to

Location: inspected section (location) starts from GPS dot My loc. ...
(.....) and ends at GPS dot My loc. ... (.....).

Length: about 2 km

Cross section: 2-lane (7.0 m paved carriageway)

Traffic volume: n.a.

Legal speed: 60 km/h and 80 km/h

Information about accidents: n.a.

B: RESULTS OF THE INSPECTION**1. Function and surrounding**




- Design of road is not suitable for its today function (it was built in '60).
- Too many small accesses without appropriate design and signs (access to private properties and farmland). *GPS: My loc. 02, 08, 10, 12 and 15.* The possibility of usage access to the farmland from backwards should be checked.



- Orientation sight is partly not guaranteed, because of the sight obstruction by the vegetation. *GPS: My loc. 13.*



- Speed limits and their location should be checked. Speed limit sign 60 km/h (*GPS: My loc. 13*) should be moved up to for about 300 m. Speed limits should be repeated after intersection (road to "truck terminal") *GPS: My loc. 14.*
- All access roads should be checked (closed or legalized with appropriate signalization).
- Problems in curves, stopping sight distance are obstructed by the vegetation.
- Obstacles: Trees and direction signs are in road safety zone.


<p>2. Cross sections</p>	<ul style="list-style-type: none"> • 2 traffic lanes. • Paved carriageway about 7.0 m, between longitudinal markings or edge of asphalt, fully additional stabilized shoulder of about 1.0 m. • Problems with existing pavement, road surface have ruttings, asphalt bleeding and pot holes. <div style="display: flex; justify-content: space-around;">   </div> <ul style="list-style-type: none"> • Bleeding or polished components at some curves (<i>GPS: My loc. 13</i>). • At some places there are no ditches or/and connection with the ditches is blocked with soil, leads to inadequate drainage in the case of heavy rainfalls. • Cross fall and superelevation looks sufficient for 60 km/h. • The traffic of horse carts and cyclist is forbidden by signs. • Part of drivers are speeding – Lack of Police speed control or stationary cameras.
<p>3. Alignment</p>	<ul style="list-style-type: none"> • Sight is obstructed by vegetation
<p>4. Intersections, Traffic lights, Railway crossings</p>	<ul style="list-style-type: none"> • There are few small (agriculture) intersection (at some of them right of way was not signed - stop signs are missing). <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • One bigger intersection with the road to the truck terminal has some curbed islands. There is space for a left turning lane and a taper for right turning but no clear guidance by marking and signing as well as no direction signs. Pot holes are present at secondary road. • Intersection (road to truck terminal) is in an acceptable way visible and recognizable.






- In the most cases no sufficient sight conditions for the agricultures and plant roads (sight was obstructed by) vegetation, pls see below example for a "driver view".



- Some connection to old road area should be demolished to avoid illegal use (see picture at page 9)
- The connection point with the old road and an agriculture way at the left hand side at the beginning of the inspected section should be reorganized (clear organization as a single access, missing signing).

<p>5. Traffic signals 6. Railway crossings</p>	<ul style="list-style-type: none"> No facilities, no comments
<p>7. Service and rest areas</p>	<ul style="list-style-type: none"> At the end of inspected section (near by gasoline station, <i>GPS: My loc. 15</i>) service and rest areas are at one side of road and parking facilities are on the other sides of the road. There is no left lane for the gasoline station (but the asphalted width would be sufficient for this). No clear definition of organization in gasoline station and parking.  <ul style="list-style-type: none"> Deceleration and acceleration lanes at the entrance and exit are not defined (right of way was not defined). The sight at parking and gasoline station can be obstructed by parked vehicles.
<p>8. Public transport 9. Needs of vulnerable Road users</p>	<ul style="list-style-type: none"> No facilities, no comments
<p>10. Traffic signing, marking and lighting</p>	<ul style="list-style-type: none"> Visibility of the road esp. at night should be improved by adding the delineators. Some stop signs are missing at access roads, and some speed limit signs (signs and markings should be the same for the both direction). There are no information signs for gasoline station and parking area. Vegetation causes the problems to the sign visibility. Signs retro reflective function should be checked. There are problems with big directional signs (solid obstacle-like structure of poles).

	<div style="display: flex; justify-content: space-around;">   </div> <ul style="list-style-type: none"> • Markings should be renewed through regular maintenance (once per year). Edge line should be marked. • There are some phantom markings at old by pass roads. • Horizontal and vertical signalization must be correspondent (contradictions with overtaking are found).
<p>11. Road side features</p> <p>Civil engineering structures Plantings and trees Other obstacles</p>	<ul style="list-style-type: none"> • There are some dangerous features within the safety zone (direction sign and tree). <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Vegetation along the road can cause the visibility problems. Sight is obstructed by the planting (vegetation) in curves and at intersection (agriculture) roads. • At the small bridge is a concrete barrier installed, but some extension with steel guard rail before and after the bridge



- At the two culverts (GPS: My loc. 09) guard rail should be installed.



- Some guard rail poles are considered as obstacles (GPS: My loc. 05 and 07).
- Guard rail should be added at the bridges area, culverts protection and big direction sign.
- Guardrail start and end treatment are not according the safe standards (should be improved towards EU norms EN 1317). One beam was welded, it is dangerous, bolted connection are insufficient, in a case of a hit the function can not be guaranteed

Assessment of the deficits:

The most critical deficits in respect of road safety are:

- Number of small and illegal intersection and accesses to the private properties is in the contradiction with the foreseen function and operation,
- Bad sight conditions along the road and at access points (regular maintenance of the road),
- Improving of the road signing and marking (including the intersection, for marking the usage of modern cold plastic materials with better retroreflection and better sustainability is recommended),
- Problems regarding the pavement of the carriageway (rutting, pot holes)
- Drainage system should be improved (re-profiling of ditches),
- Few fixed hard obstacles near by road (directional signs and tree),
- No left turning lanes on gasoline station (it should be checked).
- Existing guardrail system is partly incomplete

PART C: PROPOSALS AND RECOMMENDATIONS

1. Short term proposals:

The following measures should be done immediately:

- Speed limit concept should be revised (speed limit should be 60 km/h on bought side),
- Regular maintenance (clearing of vegetation along the road and at small intersection, repairment of road surface, improvements of signing and markings)
- Improvements of the guardrails system (general remark: For future projects it is recommended to use consequently the European Guideline EN 1317)

2. Medium term proposals for the project

The following measures will be proposed:

- Changing of the signs (with EU standards),
- Concept of closing the illegal access to the road, organizing of access backwards
- Rehabilitation of the road section (new pavement),

3. Long term measures

- Construction of new motorway will attract traffic from M ... road, and it will be alternative solution for drivers.

Remark: For the purpose of RSI we used GPS equipment for precise definition of some

location (*GPS location from 01 to 15. Please see Annex 1.*).

Annex 1: GPS locations with description

GPS dot name:	Coordinate (N E)	Short description of place
My Location 01	N ... E ...	Beginning of RSI
My Location 02	N ... E ...	Unsigned intersection
My Location 03	N ... E ...	Direction sign to close the carriageway and with hard (solid) structure. Tree is too close to carriageway
My Location 04	N ... E ...	Sign to close the carriageway and with hard (solid) structure
My Location 05	N ... E ...	Deviation for construction road (pots only)
My Location 06	N ... E ...	Bridge
My Location 07	N ... E ...	Drainage problems and deviation for construction road (pots only)
My Location 08	N ... E ...	Stone factory
My Location 09	N ... E ...	Unprotected culvert
My Location 10	N ... E ...	Illegal access road
My Location 11	N ... E ...	Missing signs
My Location 12	N ... E ...	Unprotected culvert
My Location 13	N ... E ...	Sign at the wrong position
My Location 14	N ... E ...	Missing signs at intersection
My Location 15	N ... E ...	End of RSI (gasoline station)

