

PRESENTATION OF THE DRAFT ROAD SAFETY INSPECTION MANUAL (The RSI report – some practical advices for RSI)

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THE RSI REPORT – SOME PRACTICAL ADVICES FOR RSI

FOUR steps of RSI procedure : Cont. of pres. No. 12

STEP 1 Preparatory work in the office

STEP 2 On site field study (field study)

STEP 3 RSI findings and report

STEP 4 Remedial measures and follow-up

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4.3 PREPARATORY WORK IN THE OFFICE 1/6

Road function

- Describe the **function of the road**.
- Is it a national, regional or a local road?
- Is the road a school bus route?
- Does the road **pass through any towns or villages**?
- What kind of **vehicle traffic** uses this road?
- Is it **long distance or short distance traffic**, or maybe there is a mix of different kinds?

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4.3 PREPARATORY WORK IN THE OFFICE 2/6

- What about **heavy vehicle traffic**? Is the proportion more or less than other similar roads?
- Is the road a part of a **freight route**?
- Do **vulnerable road users**, such as pedestrians, scooter riders or cyclists, use the road?
- If the road passes through **agricultural areas**, are there slow moving vehicles along the road.

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4.3 PREPARATORY WORK IN THE OFFICE 3/6

Traffic situation

- Determine the **traffic volume and the traffic growth during the last five years** (AADT, percentage of heavy truck etc).
- Determine the **types of vehicles that make up the total traffic count** - cars, trucks, scooters, motorcycles, buses as well as the relative density of cycles and pedestrians. Is there any traffic volume prediction for the road?

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4.3 PREPARATORY WORK IN THE OFFICE 4/6

Road standard

- Describe the **road standard** in general and how it relates with the road function, traffic volume, types of junctions and intersections, speed limits, etc.
- Analyze the **speed limits**. Are they reasonable for built-up areas, presence of vulnerable road users, especially children, elderly and disabled persons, the alignment of the road, etc?

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4.3 PREPARATORY WORK IN THE OFFICE 5/6

For the RSI the following personal and technical equipment should be organised:

- Maps, any drawing of previous projects
- Water level to check the cross fall and super elevation especially in curves
- Tape measure/measuring wheel
- Digital camera (for pictures and on request short film sequences)
- Aerosol can for marking specific spots
- Some form of recording e.g portable computer, tape recorder
- Paper and pencil



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4.3 PREPARATORY WORK IN THE OFFICE 6/6

- Stop watch if you wish to record vehicle speeds, headway gaps and traffic flows
- Optical distance measuring tool
- A handhold speed gun (radar pistol) may be helpful too
- Checklists
- Warning/safety vest or jacket
- Yellow blinking light for cars and blinking torches for inspection at night
- Suitable clothing for the actual weather condition
- A letter of comfort is recommended, if officials or residents will be asking



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4.4 FIELD STUDY 1/4

- When conducting the RSI the Inspector must place himself in the position of the various road users (motorist, cyclist and pedestrian) so that he can judge the traffic safety of the construction from the viewpoint of all road users.



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4.4 FIELD STUDY 2/4

Surroundings

- Describe the surroundings in general – rural, urban, ...
- Surrounds the road - forest, agricultural area, built-up, ...
- If there is a built-up area, describe the type in greater detail, such as an industrial area, shopping area, residential, ...
- If there are facilities that generate heavy traffic.
- If the road is in a rural area, are there linear settlements at long distances along the road?
- Are there accesses to properties?



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4.4 FIELD STUDY 3/4

Traffic situation

- The road safety Inspectors should observe the traffic flow and document traffic incidents which could easily lead to accidents in specific traffic compositions. They could measure the average speed with speed guns. Specific activities which generate traffic and the mix of traffic should be noted including the level of activity by vulnerable road users.



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4.4 FIELD STUDY 4/4

Infrastructure deficiencies

- Road safety inspections aim to detect all deficiencies on existing roads that may cause accidents or could have an influence on the severity of accidents. The checklists provided in Appendix 1 will help to detect deficiencies which regularly lead to accidents.



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4.4 RSI FINDINGS AND REPORT 1/2

- The RSI report should be made up of an introduction, three parts and appendices with maps, pictures and illustrations as necessary.
- The report is delivered to the RSAIU and to Client via RSAIU.



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4.4 RSI FINDINGS AND REPORT 2/2

- A typical table of contents on a RSI report would be:
 - Introduction including details about inspected road
 - Part A. Project data
 - Part B. Investigation form with the deficiencies
 - Part C. Proposals and options for counter measures
- Appendix Maps and Illustrations (in order to clarify the results). This can be also include in the Part B.



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4.5 COMPLETION OF THE RSI 1/2

Completion meeting

- A clarifying meeting between the Client and the Inspectors could be helpful to discuss the inspection result.

Response to the Inspection report

- The Client reviews the formal RSI report and considers the indicated problems and proposals. The Client decides finally whether recommendations are to be adopted or not.



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4.5 COMPLETION OF THE RSI 2/2

Problems identified that are not considered suitable by Client, must be addressed to Auditor and CBMoT by means of a formal response.

It is important that this formal response gives reasons why the recommendations are not accepted.

This response acts as an evidence trail through the decision making process.



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- The Inspector should note any detected problems in the report. It is useful to sort the findings by importance, relevance and kind.
- The report is delivered to the RSAIU and to Client via RSAIU.
- The report should clearly describe general information like the inspected road section and the inspection team members.
- The road safety deficiencies should be explained and the Inspector should make recommendations about stepwise measures to improve the situation.



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- It is very important to write down findings on any working documents and these notes must be kept as evidence.
- The checklists can be helpful as working document in that way. In the last row "comments" the Inspector could make remarks (for later easier explanation to Client). Also in the case of findings which are finally not relevant and not part of the formal report would be helpful to indicate them there.



THE RSI REPORT – SOME PRACTICAL ADVICES FOR RSI

- The RSI report should be made up of an **INTRODUCTION, THREE PARTS** and **APPENDICES** with maps, pictures and illustrations as necessary.
- The **INTRODUCTION** should include details of the road or section of road being inspected and the composition of the inspection team, date, times and conditions at the time of the inspection.



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- **PART A** should outline the background data obtained during the preparatory work in the office and a description of the activities undertaken.

Data about road function, traffic situation, road standards, surroundings, ...



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- **PART B** describes the shortcomings or deficiencies which were found and an assessment of these deficiencies. It should contain the completed investigation form and the documentation with pictures.



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- **PART C** Proposals and options for counter measures – short term (e.g. signage, enforcement), medium term (e.g. speed reductions using traffic calming measures, refuge islands for pedestrians etc) and long term (larger investment may be required). A brief cost estimate should be included if it is possible.



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- **APPENDIX MAPS AND ILLUSTRATIONS** (in order to clarify the results, different kinds of illustrations may be used including photos and sketches of countermeasures, locations need to be specified) as separate Annex or could also include in the Part B.



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- The **RSI report lists the safety deficits** that have been identified.
- A collection of relevant **pictures** in the report or as Annex **are helpful** as evidence and makes it easier for decision makers to follow the recommendations.
- The **proposed measures will be helpful** to prepare an **investment plan** for the necessary stepwise investments to improve the situation.



Thank you for your attention!



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