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# Road Network Safety Management

Brussels, Belgium  
September 19-23, 2022



Workshop



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## Background

Preventive risk assessment tools, such as road safety audits and inspections, are an effective and essential instrument to help road authorities reduce the number of crashes and casualties, because design standards alone cannot guarantee road safety in all conditions.

Risk assessment procedures can typically be applied at successive stages of road planning, design, opening and operations. They all serve the common purpose of identifying risk factors related to road design or traffic control that may lead to crashes, or make crashes more severe. In many cases, they help network highway operators and city traffic departments identify engineering weaknesses and hazardous road sections, even in the absence of robust traffic injury data.

This course introduces practical pathways to improved road safety performance through policies and measures that target recurrent road safety management and engineering weaknesses.

## Learning Objectives

- ✓ Focus on road deficiencies that lead to severe and fatal injuries
- ✓ Identify the different network safety management tools available to practitioners as they apply to all users of the road network
- ✓ Understand the benefits, resources and liability issues associated with each tool & identify the practical requirements to implement them
- ✓ Understand the scope of, and correctly utilize national and international reference manuals
- ✓ Identify data sources available to support decision making and how to overcome integrity & quality issues
- ✓ Use advanced technology to forecast and analyze traffic safety conditions in streets and highways

## Target Audience

- Road Safety Professionals
- Highway Engineers and Managers
- Federal and State Road Agencies
- Project Implementation Units
- Private Consultants & Contractors

## Lead Instructor



### **Dr. Rob Thomson, Professor of Vehicle Safety, Chalmers University**

My research in road safety began in 1988 when I began post graduate studies with the UBC Accident Research Team in Vancouver, B.C., Canada. Since then I have worked in almost all areas of road and traffic safety. Crash testing, accident analysis, numerical modeling, and analyzing vehicle test data have been my methods to understand why and how we are injured in a crash.

## Registration (hotel accommodation not included)

- **2,000 Euros IRF Members / Groups of 3 or More**
- **2,300 Euros Non IRF Members**

Register at: <https://www.irf.global/event/rnsm22-ws-brussels>

### **Seminar Hotel:**

Hotel Barsey by Warwick

Address: 381-383, Av. Louise, 1050 Brussels, Belgium

Phone: +32 2 641 51 30

Website: <https://www.warwickhotels.com/hotel-barsey-by-warwick>

Email: [info.warwickbarsey@warwickhotels.com](mailto:info.warwickbarsey@warwickhotels.com)



# Agenda

Monday – Friday (9:00 AM – 4:30 PM)

## September 19

- What the “Safe System” means for road & highway professionals
- Factors that contribute to road crashes
- Understanding & identifying road risk – using data to narrow down the problem
- Proactive and reactive approaches to road infrastructure safety management

## September 20

- Fundamentals of Vehicle Collisions
- Types of safety data (qualitative and quantitative) and their sources
- High Risk Site Management

## September 21

- Introduction to Safety Performance Indicators
- Advanced data collection methods
- Safety data collection, quality, and management
- Theory and application of Crash Reduction Factors
- Practical applications of road safety countermeasures

## September 22

- Methods of measuring safety
- Collision Modification Factors (CMFs)
- Safety Performance Functions (SPFs) and their application

## September 23

- Leveraging Artificial Intelligence in support of Risk Analysis
- Review & Presentation of Certificates
- Field Trip

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## International Road Federation

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