Improving road safety in OIC countries

Conceptual Framework for Road Safety and Global Trends

COMCEC

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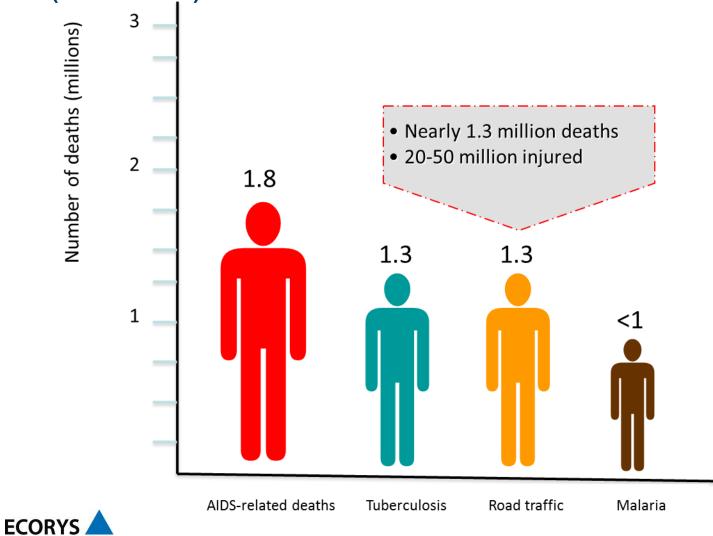
Contents

- Background and rationale of the project
- Objective of the project
- Process to deliver the objective
- Global trends
- Framework for Road Safety





Some facts about Road Safety – leading cause of death (source: WHO)





Some facts about Road Safety – expected to grow (source: WHO)

2004

Rank	Disease or Injury	
1	Ischaemic heart disease	
2	Cerebrovascular disease	
3	Lower respiratory infections	
4	Chronic obstructive pulmonary disease	
5	Diarrhoeal diseases	
6	HIV/AIDS	
7	Tuberculosis	
8	Trachea, bronchus, lung cancer	
9	Road traffic injuries	
10	Prematurity & low-birth weight	

2030

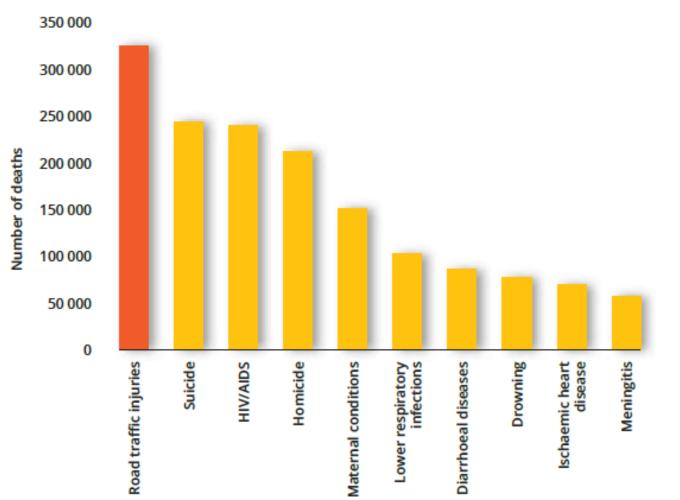
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Rank	Disease or Injury	
1	Ischaemic heart disease	
2	Cerebrovascular disease	
3	Chronic obstructive pulmonary disease	
4	Lower respiratory infections	
5	Road traffic injuries	
6	Trachea, bronchus, lung cancer	
7	Diabetes mellitus	
8	Hypertensive heart disease	
9	Stomach cancer	
10	HIV/AIDS	





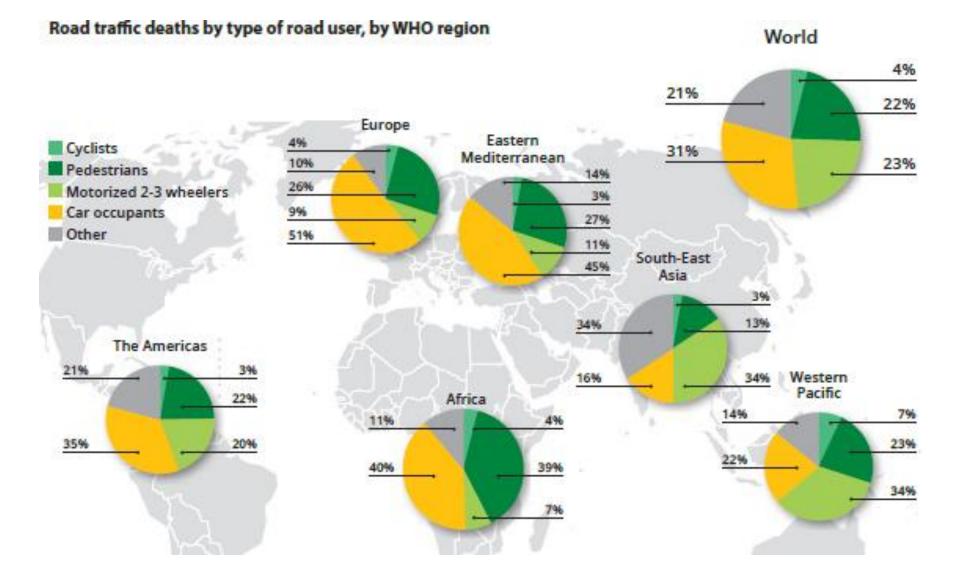
ECORYS

Some facts about Road Safety – age group 15-29 (source: WHO)





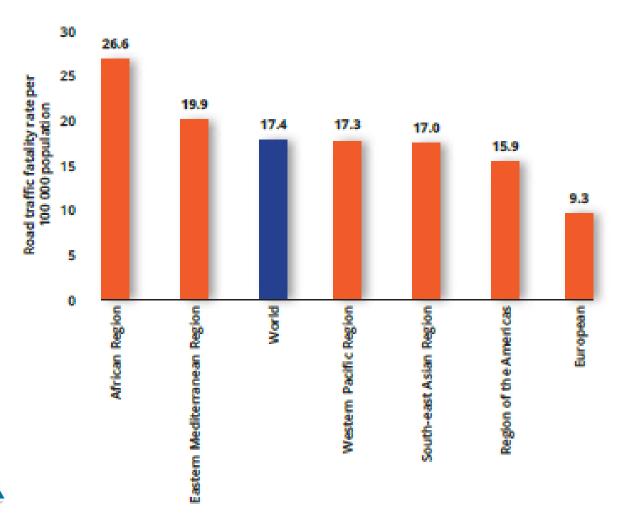
Background and rationale Some facts about Road Safety – road users



ECORYS

Some facts about Road Safety – regions of the world (WHO)

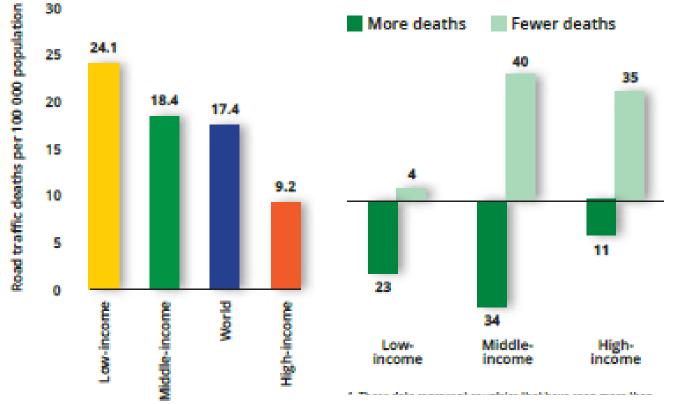
Road traffic fatality rates per 100 000 population, by WHO region





Some facts about Road Safety – income groups (WHO)

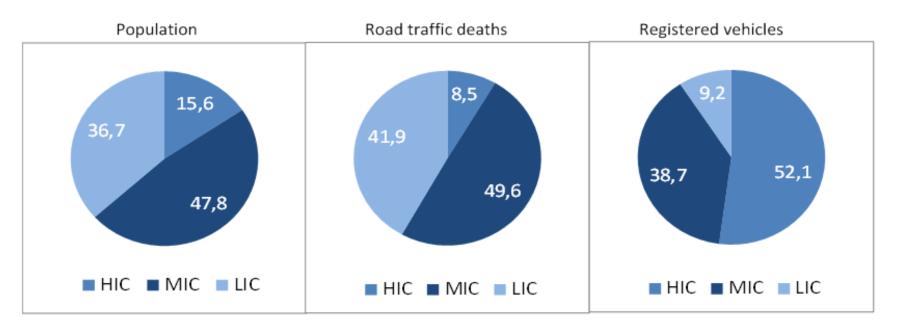
Road traffic deaths per 100 000 population, by country income status^a Countries showing changes in the number of road traffic deaths, 2010–2013, by country income status²







Background and rationale Some facts about Road Safety (WHO)



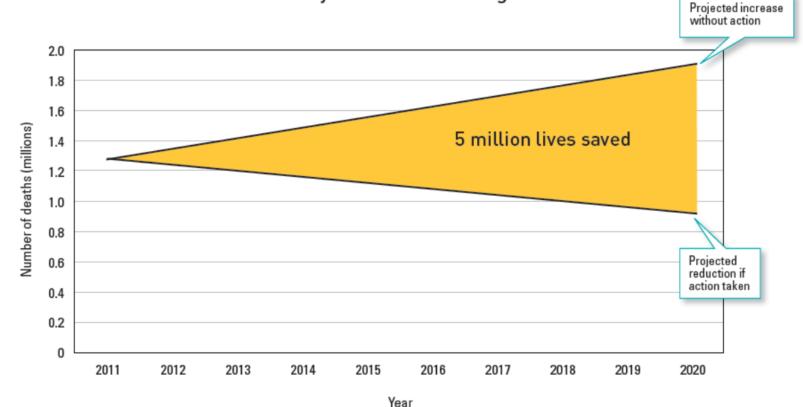
- Over 90% of road traffic deaths occur in low and middle income countries, which have only 48% of the world's registered vehicles.
- Expected growth in car ownership and motorisation in low and middle income countries will put pressure on road safety.





Background and rationale United Nations: Decade of Action for Road Safety

Decade of Action for Road Safety 2011-2020: saving millions of lives



To stabilise and then reduce the forecast level of road traffic fatalities around the world by 2020





Objectives of the project

Against the background of stated trends in Road Safety

The objective is to assist OIC member countries with the **reduction** of road accidents and prevention of casualties and serious injuries.

This is done by:

- Developing of a **framework for road safety**, based on international best practice, that can be applied in OIC countries.
- Reviewing of road safety status in OIC countries.
- Defining **conclusions and recommendations** on how to improve road safety in OIC countries.

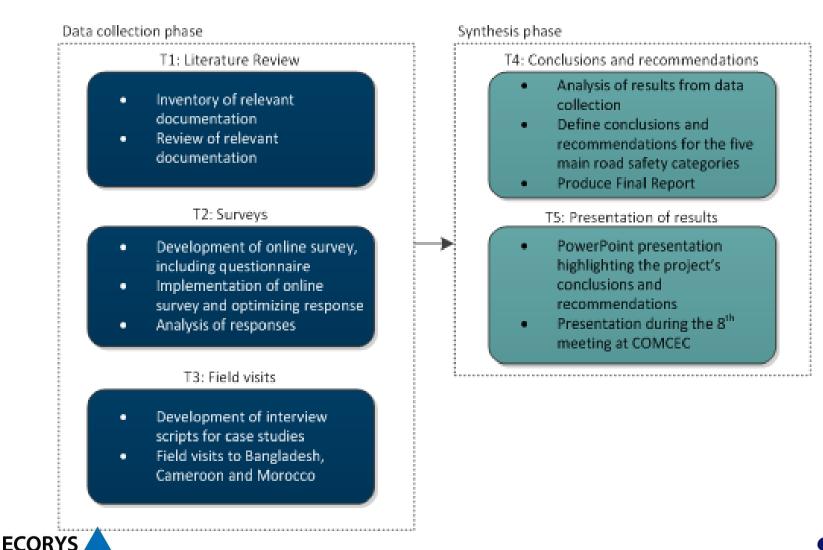
The project will contribute to the process of **raising awareness** of road safety among the OIC countries, as well as to **trigger a debate** on how to improve road safety.





Process

Five tasks to deliver the objective and results



SWOV

Process

Data collection tasks elaborated

Literature review:

- International best practices
- OIC member countries: data (including WHO global status reports, IRF, IRTAD) and literature on road safety status in OIC member countries.

Survey:

• Two-step survey approach, with an initial screening survey and a more in-depth follow-up survey.

Case studies:

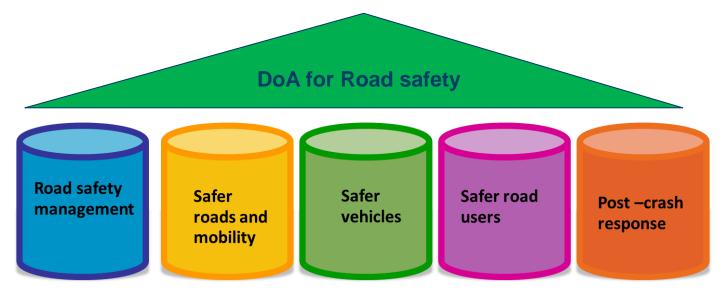
• Three case studies with field visits in Bangladesh, Cameroon and Morocco.





DoA: five road safety pillars

- Five pillars, linked to the three E's: education, enforcement, engineering.
- Interaction between pillars, integrated approach

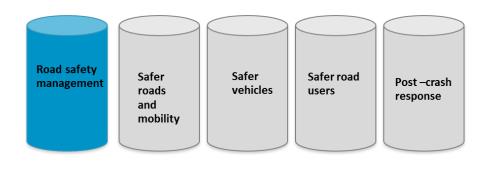






Pillar 1– Road safety management

- Strengthen institutional capacity
- Establish lead agency
- Develop a national road safety strategy
- Set realistic and long-term targets
- Develop data systems



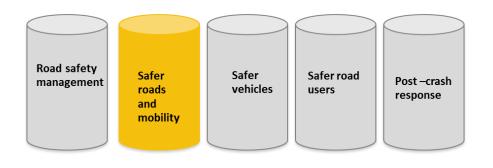






Pillar 2 – Safer roads and mobility

- Improve safety-conscious planning, design, construction and operation of roads
- Assess regularly safety of roads
- Explore various forms of transport and safe infrastructure



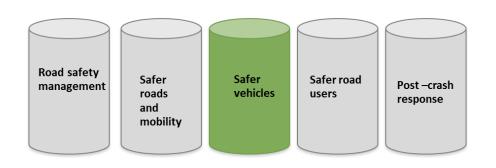






Pillar 3 – Safer vehicles

- Harmonize global standards
- Implement new car assessment programmes
- Equip all new cars with minimum safety features
- Promote use of crash avoidance technologies
- Encourage managers of fleets to purchase, operate and maintain safe vehicles



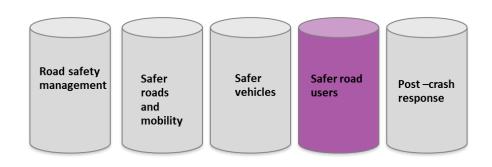






Pillar 4 – Safer road users

- Adopt model road safety legislations
- Sustain or increase enforcement
- Promote public awareness of risk factors
- Call for activities to reduce work-related road traffic injuries
- Establish graduated driver licensing programmes for novice drivers



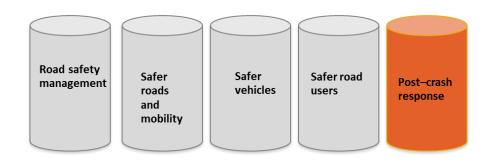






Pillar 5 – Post-crash response

- Develop pre-hospital care systems, including ambulances
- Put in place single nationwide emergency telephone number
- Provide early rehabilitation and support to injured patients
- Investigate crashes and provide legal response









Safe systems approach

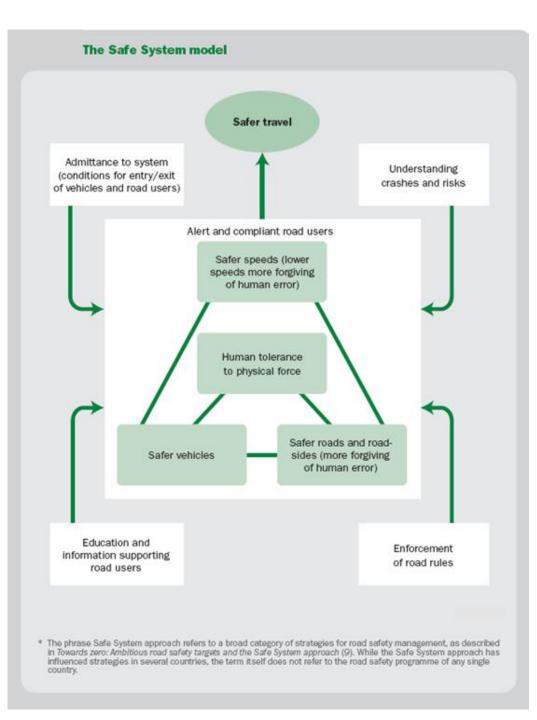
- Safe System approaches typically aim to develop a road transport system that is better able to accommodate human error by providing a safe operating environment - despite human fallibility - and providing effective post-crash care.
- A system-wide intervention strategy addressing all crashphases and all Safe System elements is to be adopted, which addresses the safety of all road users.
- Examples:
 - -the Netherlands: Sustainable Safety
 - -Sweden: Vision Zero





Global trends Safe systems approach

- Integrated approach, targeting road safety elements
- Placing the road user central





Safe systems approach – example the Netherlands – Sustainable Safety

Principles	Description
Functionality of roads	Single function of roads as either through roads, distributor roads, or access roads, in a hierarchically structured road network.
Homogeneity of mass and/or speed and direction	Equality in speed, direction, and mass at medium and high speeds.
Predictability of road course and road user behaviour by a recognisable road design	Road environment and road user behaviour that support road user expectations through consistency and continuity in road design.
Forgiving road environment and road users	Injury limitation through a forgiving road environment and anticipation of road user behaviour.
State of awareness by the road user	Ability to assess one's task capability to handle the driving task.

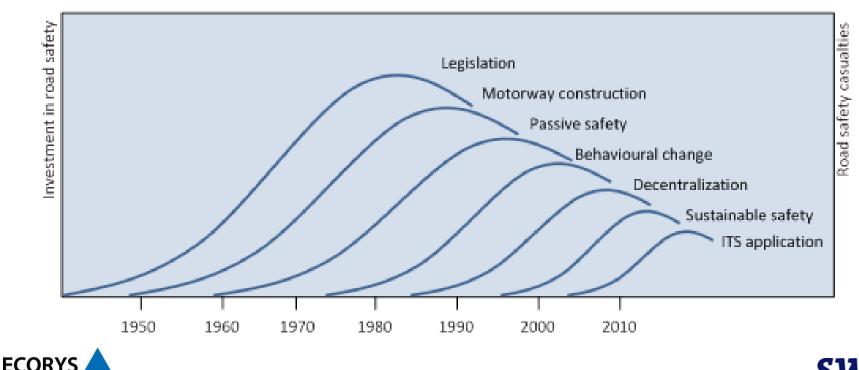






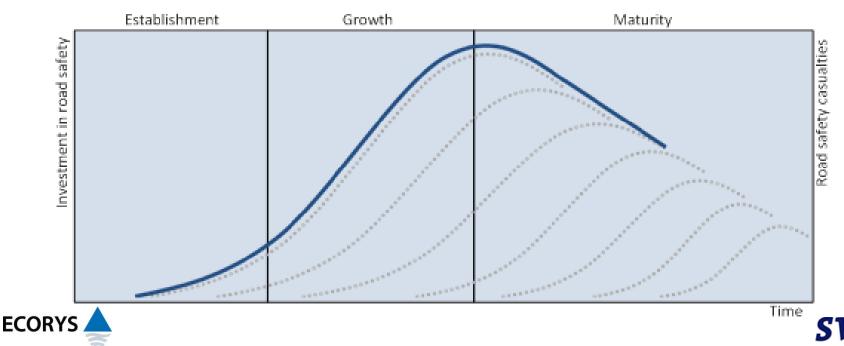
Road safety development phases

- Typical pattern of policy development and investment in road safety improvement (the Netherlands, over the last decades).
- Typical development phases: establishment, growth and consolidation.



Road safety development phases

- Universal pattern of establishment, growth and maturity.
- Number of road safety casualties initially increase as a result of growing motorization and relatively low investment in road safety and limited road safety interventions.
- The trend can be reversed though investment in road safety and development of effective road safety policy and measures.



Road safety development phases

- Each road safety development phase has its **typical** characteristics.
- We have described these characteristics for the five road safety pillars:
 - -Road safety management (special focus on data)
 - -Safer roads and mobility
 - -Safer vehicles
 - -Safer road users
 - -Post-crash response
- Each country can position itself based on the characteristics in a development phase (establishment, growth, consolidation).
- We have prepared **typical policy measures** per development phase for each of the five pillars.





Road safety development phases – establishment/road safety management

- Garner political support for road safety.
- Improvement of poor to medium quality road safety information systems.
- Development of co-ordination structures.
- Assigning lead agency responsible for road safety management.
- Development of coordination structures.
- Development of policy review procedures.
- Setting of short term targets and long term initiatives.
- Develop and maintain specific delivery partnerships between government, NGO, community and business at the central, regional and local levels.
- Establish a reliable crash reporting and recording system.





Road safety development phases – establishment/safer roads and mobility

- Develop road network categorisation plans.
- Develop appropriate functional and operational characteristics for road types.
- Setting of appropriate speed limits.
- Encourages public transportation use.
- Develop strategies and plans for vulnerable road users.
- Secure funding for development projects.
- Improve roads and road network connectivity.





Road safety development phases – establishment/safer vehicles

- Establish vehicle registration registers.
- Develop minimum standards for entry of vehicles on public roads.
- Develop roadworthiness criteria and monitoring systems.
- Develop enforcement strategies.
- Set standards and regulations regarding the use of vehicles.





Road safety development phases – establishment/safer road users

- Set the safety standards and rules and continuing compliance requirements that will ensure the safety of the individual concerned but also that of fellow road users,
- Develop standards for driver licensing, testing and appraisal,
- Driver offences monitoring,
- Develop and implement educational programmes for school children,
- Develop strategies to improve safety of vulnerable road users,





Road safety development phases – establishment/post-crash response

- Review the capabilities and capacity of trauma response units.
- Establish key performance data and set targets.
- Develop monitoring systems.
- Implement regional pilot projects.
- Develop strategies to improve capacity and resource allocation for trauma response and management.





Road safety framework Road safety development phases – establishment/post-crash response

Framework for road safety

- Safe systems approach
- Road safety management: five pillars and road safety data
- Lead road safety agency
- Road safety development phases

Road safety in OIC member countries

- Road safety performance
- Assessment of road safety management through desk and questionnaires
- Case studies: Bangladesh, Cameroon, Morocco

Conclusions and recommendations

- General conclusions
- Specific conclusions and recommendations per groups of OIC member countries
- Combining best practices in a road safety framework.
- Applying the road safety framework to results of the road safety reviews of OIC countries as a basis for defining conclusions and recommendations.



