



Policy Paper

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# Road safety

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Technical Resources Division  
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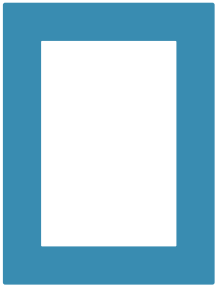


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## Policy Paper

# Road safety

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Increasingly common in developing economies, road crashes are responsible for premature deaths, physical impairments and psychological distress. The impact on victims, families and society in general is considerable.

According to the World Health Organization, around 1.24 million people worldwide are killed in road crashes every year. This is simply unacceptable. More than half of all road crash casualties are involving people aged between 15 to 44 years. Among those aged between 15 and 19 years and 5 and 14 years, road crashes are respectively the leading and second foremost cause of preventable death.

Road crash injuries are not only a primary cause of disability but they also result in a huge financial burden on those affected, particularly in developing economies. As such, the all too apparent link between road safety and sustainable development has resulted in the inclusion of a specific target that seeks to halve the number of road crashes by 2020, under the health objective in the new Sustainable Development Goals. This is a strong signal indeed from the international community on the necessity to address this important issue, considered as a socioeconomic and public health disaster.

With this in mind, Handicap International Federation has set road safety as a priority for its communication and advocacy messages in the 2016-2025 Federal strategy. For the past ten years, our organisation has been addressing in a comprehensive manner road safety through a range of specific interventions based on the five pillars of the United Nations' Decade of Action for Road Safety (2011-2020): 1) Road safety management; 2) Safer roads and mobility; 3) Safer road users; 4) Post-crash response including essential rehabilitation services; and 5) Safer vehicles.

Aligned with this Decade, Handicap International's road safety interventions focus on strengthening legislation, policies and standards, ensuring behaviour changes related to major risk factors such as non-use of helmets and seatbelts, drink-driving and speeding and improving the post-crash response while calling for road safety authorities to provide effective road safety management.

Millions of lives can be saved - if all the different stakeholders work together for a safer road system. This policy paper proposes ways forward, along with clear strategies and actions to achieve improved societal and health outcomes.

**Muriel Mac-Seing**

Head of Prevention and Health Unit

Handicap International Federation

September 2015



Vietnam, 2014

# Principles and benchmarks

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# Definition, importance and context

## A

### Road safety terminology

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The objective of road safety is to reduce the harm (deaths, injuries, impairments and damage to property) resulting from crashes. This is achieved by using a safe system approach that typically involves three interactive elements:

- **Safer road users:** Improving the attitudes and behaviour of road users such as drivers and passengers of motorised vehicles, cyclists and pedestrians. Actions to achieve this goal involve educating drivers, raising public awareness, improving emergency response times and law enforcement;
- **Safer road environments:** Designing and constructing roads and systems to reduce crash risk;
- **Safer vehicles:** Encouraging consumers to purchase safer vehicles and manufacturers to produce safer vehicles and implementing fleet safety policies.

A **safe system approach**<sup>1</sup> is based on the understanding that the human body is vulnerable. Therefore, the aim of the three elements in this approach is to reduce the likelihood of crashes and minimise death and serious injury<sup>2</sup> when they occur. Furthermore, this approach identifies the **shared responsibility** of road system and vehicle designers, manufacturers and users in achieving this outcome. Supporting the safe system approach, Handicap International is involved in actions targeting road users to adopt safer behaviour and foster safer road environments.

It is important to note that the term **“accident”** is replaced with **“crash”** in all Handicap International discussions and

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documents on the topic of road safety. This stems from the need to change fundamental perceptions of the nature of road traffic crashes. As the World Report on road traffic injury states: “Historically, motor vehicle “accidents” have been viewed as random events that happen to others and as an inevitable outcome of road transport. The term “accident”, in particular, can give the impression of inevitability and unpredictability – an event that cannot be managed.”<sup>3</sup>

Handicap International believes that road crashes are both preventable and predictable, and so appropriate measures and actions can be instituted to reduce crashes, injuries and fatalities. In this context, the term **“victims”** of road crashes is used rather than **“survivors”** as this is the term generally used by victims themselves, such as the European Federation of Road Traffic Victims. “Victims” here include those directly involved in crashes as well as their families and communities.





# B

## Road safety in the world and inter-linkages to disability

Rapidly increasing, deaths and injuries from road crashes are a major public health issue. The World Health Organization (WHO) has estimated 1.24 million people worldwide are killed in road crashes every year and that almost half are pedestrians, motorcyclists or cyclists. In addition, road crashes cause between 20 million and 50 million non-fatal injuries per year and are a **major cause of disability**<sup>4</sup>. Deaths from injuries sustained in road crashes account for around 25% of all injury fatalities<sup>5</sup>.

More than 90% of all road crash deaths occur in low- and middle-income countries, even though these countries have only 48% of the world's vehicles. While road crash death rates in many high-income countries have stabilised or even declined in recent decades, research suggests an increase in most of the world's regions and, should trends continue unabated, that they will rise to an estimated 2.4 million a year by 2030<sup>6</sup>. Without appropriate action, road crash injuries are predicted to be the fifth foremost contributor to the global burden of disease and injury, behind cardiovascular and pulmonary diseases<sup>6,7</sup>.

Top ten leading causes of death, 2004 and 2030 compared<sup>8</sup>

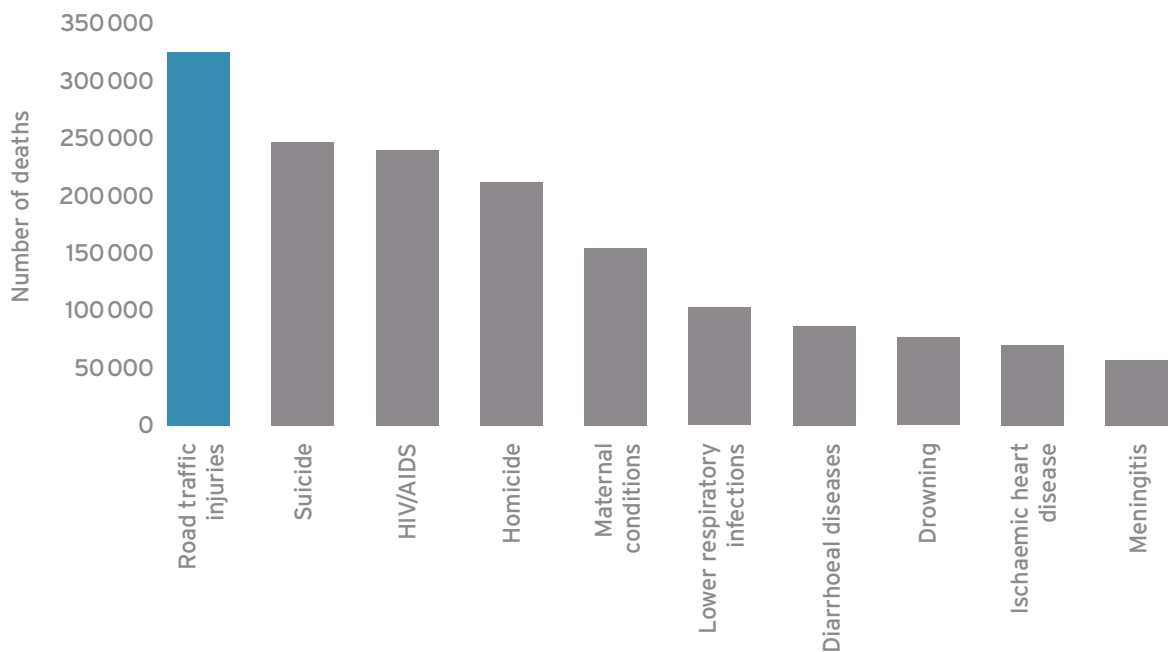
2004		2030	
Rank	Disease or injury	Rank	Disease or injury
1	Ischaemic heart disease	1	Ischaemic heart disease
2	Cerebrovascular disease	2	Cerebrovascular disease
3	Lower respiratory infections	3	Chronic obstructive pulmonary disease
4	Chronic obstructive pulmonary disease	4	Lower respiratory infections
5	Diarrhoeal diseases	5	Road traffic injuries
6	HIV/AIDS	6	Trachea, bronchus, lung cancers
7	Tuberculosis	7	Diabetes mellitus
8	Trachea, bronchus, lung cancers	8	Hypertensive heart disease
9	Road traffic injuries	9	Stomach cancer
10	Prematurity & low-birth weight	10	HIV/AIDS

## Definition, importance and context

Worldwide, more than half of all road crash casualties occur in the 15 to 44 year age-group - the principal group of wage-earners and child-raisers. Regarding gender, men are disproportionately affected as they represent 73% of those killed<sup>9</sup>. With an estimated 260,000 children killed annually in the world, road crashes are the leading cause of death among children and young people aged

between 15 and 19 years and the second foremost cause among those aged between 5 and 14 years<sup>10</sup>. In terms of morbidity, the number of children injured or disabled in road crashes is estimated to be around 10 million per year. WHO estimates that road crashes are the main cause of premature death and disability among children aged 5 years and over<sup>11</sup>.

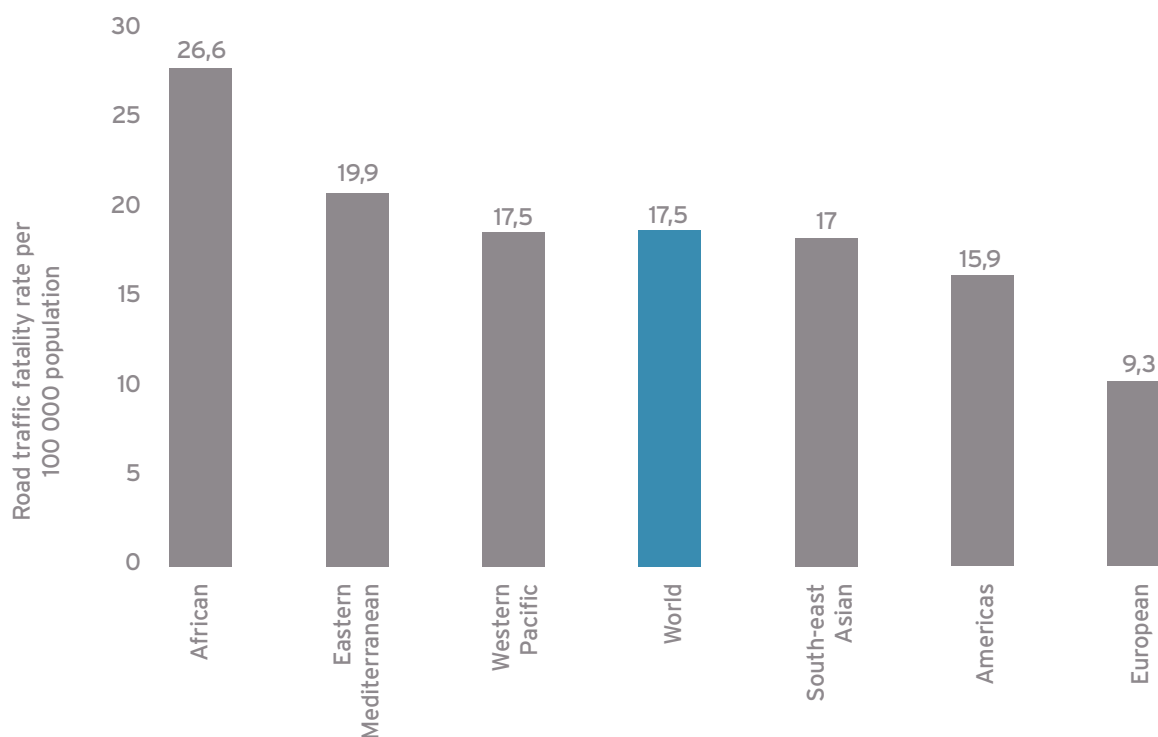
**Top ten causes of death among people aged 15-29 years, 2012<sup>12</sup>**



According to World Bank forecasts, South Asia will see a 144% increase in road crash deaths by 2020, from a baseline in 2000<sup>13</sup>, and data from countries where Handicap International provides operational support corroborate this alarming statistic. For example, over four

people die each day on roads in Cambodia, at least 70 sustain injuries and the number of fatalities more than tripled between 2002 and 2008<sup>14</sup>.

### Road traffic fatality rates per 100 000 (2013), by WHO region<sup>15</sup>



It is also crucial to observe the statistical trends at regional level. The figures below suggest a sharp increase of 40% in road crash

fatalities between 2000 and 2012 in Africa and South Asia, whereas Europe recorded a decrease of 31% during the same period.

### Road traffic mortality trends by region/per year<sup>16</sup>

	2000	2012	Variation
<b>Global</b>	1,022,000	1,255,000	+ 22%
<b>Africa</b>	143,000	201,000	+ 40%
<b>Americas</b>	139,000	154,000	+ 10%
<b>South-East Asia</b>	255,000	357,000	+ 40%
<b>Europe</b>	129,000	8,000	- 31%
<b>Western Pacific Region</b>	250,000	337,000	+ 34%

Globally, road crash injuries are **one of the main causes of disability**<sup>17</sup>. According to the World Report on Disability, “road traffic injury (...) [has] long been recognized as [a contributor] to disability (...). However, data on the magnitude of [its] contribution are very limited. (...) The number of people disabled as a result of these crashes is not well documented. A recent systematic review of the risk of disability among motor vehicle drivers surviving crashes showed substantial variability in derived estimates. Prevalence estimates of post-crash disability varied from 2% to 87%, largely a result of the methodological difficulties in measuring the non-fatal outcomes following injuries”<sup>18,19</sup>.

Invariably, according to current data, vulnerable road users (motorcyclists, pedestrians, cyclists) in developing economies are most likely to be disabled as a result of a road crash while studies show that road crashes are the primary cause of traumatic brain injury in both high- and low-income countries<sup>20</sup>. The physical cost is compounded by the psychosocial impact. Post-traumatic stress disorder, anxiety, phobias and behavioural problems have all been observed in children involved in road crashes. Also, 22% of a sample of patients attending hospital with fractures to the upper and/or lower limb or a soft tissue injury to the cervical spine (i.e. whiplash) suffer some form of disability four years after being involved in a crash<sup>21</sup>.

## C

### Socio-economic costs incurred from road crashes

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It is important to underline that road crash deaths and injuries are a huge **economic burden**, particularly for developing economies. Estimates put the annual global financial cost at around USD 518 billion. For low-income countries, the total cost is estimated to be USD 100 billion - more than the amount they receive in aid from industrialised countries<sup>22</sup>. This burden therefore negates much of the poverty reduction efforts made by these countries' governments.

And this only takes into account direct economic costs, i.e. principally lost productivity. The **strain on the public health sector** is also substantial, with road crash victims accounting for almost half of hospital bed occupancy in trauma wards in some low- and middle-income countries<sup>23</sup>.

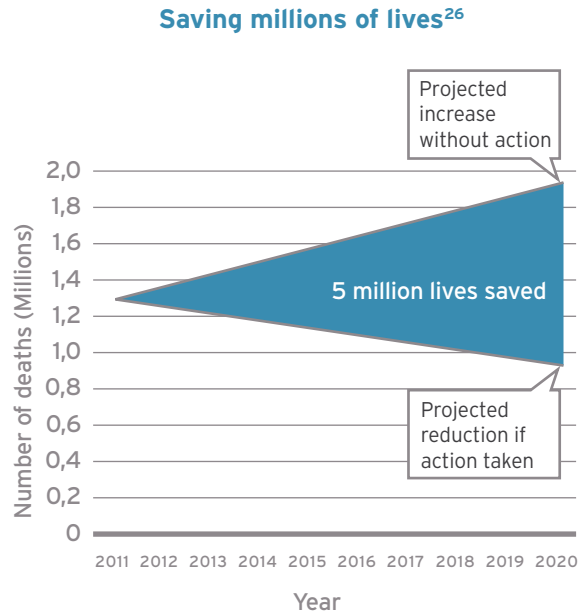
Studies have shown that the loss of a main wage-earner and head of household due to death or disability can be disastrous. In addition, it can result in a lowering of living standards and even poverty<sup>24</sup>. Families who lose the earning capacity of members disabled by road crash injuries and who are burdened with the additional cost of providing long-term care may end up having to sell most of their assets and become trapped in long-term debt - hence the critical importance of preventing road crashes and providing a timely and sustainable response.

# D

## International guidelines

### United Nations Road Safety Decade of Action (2011-2020)

Aligned with the United Nations Road Safety Decade of Action, Handicap International's action in road safety is centred on strengthening legislation, policies and standards, ensuring increased enforcement of measures to reduce major risk factors such as non-use of helmets and seatbelts, drinking and driving and speeding and improving the post-crash response while calling for road safety authorities to focus on road safety management. The overall goal is to first stabilise and then reduce the forecast level of road traffic fatalities across the world by 2020, therefore saving 5 million lives<sup>25</sup>.



According to the Road Safety Decade of Action, there are five key pillars that must be complied with in a systematic manner in order to achieve long-term road safety outcomes.

### The five pillars of the Decade of Action<sup>27</sup>

Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5
Road safety management	Safer roads and mobility	Safer vehicles	Safer road users	Post-crash response

#### Pillar 1: Road safety management

Its purpose is to:

- Strengthen institutional capacity
- Set up a lead agency with overall responsibility for road safety management
- Develop a national road safety strategy
- Set realistic long-term targets
- Develop a database system.

#### Pillar 2: Safer roads and mobility

Its purpose is to:

- Improve safety-conscious planning, design, construction and operation of roads
- Perform regular assessments of roads
- Explore various forms of transport and safe infrastructure.

### Pillar 3: Safer vehicles

Its purpose is to:

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

### Pillar 4: Safer road users

Its purpose is to:

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

### Pillar 5: Post-crash response

Its purpose is to:

- Develop pre-hospital care systems
- Institute one single nationwide emergency telephone number
- Provide early rehabilitation and support to injured people and those bereaved by road traffic crashes
- Set up insurance schemes
- Investigate crashes and provide a legal response.

### Convention on the Rights of Persons with Disabilities

Handicap International's road safety intervention is committed to being aligned with the Convention on the Rights of Persons with Disabilities (CRPD). Related articles in the CRPD include the right of persons with disabilities to access safe transport (Article 9) and ensure their personal mobility (Article 20).

In this context, road safety interventions related to disability rights are:

- Support with drawing up road safety awareness campaigns that ensure people with disabilities are not negatively portrayed in messages and pictures;
- Road safety projects and media campaigns seek to involve people with disabilities, particularly those disabled by road crashes, at every stage of the project management cycle to ensure their needs and experiences are incorporated into the project/activity;
- Set up partnerships with associations of people affected by road crashes;
- Improve safe access to transport and mobility for people with disabilities.

This list sets out actions that are not only feasible but also aligned with Handicap International's mandate and the CRPD to mainstream disability in all development processes.

### NGO Brussels Declaration

In 2009, Handicap International contributed to and consequently endorsed the Brussels Declaration on Road Safety that calls upon governments to commit to leading by example in:

- carefully managing risks,
- adopting proven low-cost casualty reduction measures,
- allocating sufficient resources,
- marshalling political support for research and strict enforcement as well as reform of road traffic laws, as and when appropriate.

To ensure the safety of vulnerable road users, particularly that of pedestrians, cyclists and motorcyclists, the Declaration also calls for roads and traffic systems to incorporate safety and sustainability as primary objectives, and for comprehensive training in good practices for town planners and road construction engineers.

# Why intervene

## A

### History of actions

In 2000, the physiotherapy project implemented by Handicap International Belgium in Lao PDR found that at least 80% of patients requiring physiotherapy had sustained their injuries in road crashes. Alarmed by this trend, Handicap International launched a programme of awareness-raising activities to alert the population to the dangers related to road injuries and, in 2002, commissioned a more comprehensive survey in selected hospitals in Lao PDR, Cambodia and Vietnam to gain a better understanding of the causes of road crashes. The survey revealed that there had been a significant escalation in road crashes during the previous decade due to factors such as the increase in the number of vehicles and a lack of road safety knowledge in the region. At the same time, Handicap International produced and disseminated its first publication on road safety - a literature review<sup>28</sup> of road safety issues in developing countries, which identified road crashes as a major public health issue and a cause of disability.

Further to the findings of this survey and after calculating the global cost of road crashes, Handicap International went on in 2003 to launch pilot road safety projects in Lao PDR, Cambodia and Vietnam. Focusing initially on public awareness campaigns and education to prevent road crashes and injuries while lobbying and supporting governments and civil society stakeholders in all three countries to adopt a more pro-active approach to road safety.

## B

### Field experiences and lessons learned

The pilot projects mentioned previously were successful. Drawing on these early experiences, all three countries' road safety programmes subsequently expanded their scope of activity and geographical reach to the levels seen today.

Many of Handicap International's road safety projects are now in their second or third phase of implementation, with each operating in close partnership with government authorities and civil society.

Handicap International has thus made a significant contribution to the overall improvement of road safety in the targeted countries. Over the years, project evaluations have concluded that the expected results have been achieved. Significant and positive evidence-based outcomes are as follows:

- **Institutional and legal road safety frameworks established:** Handicap International's technical support has in all the countries where it has taken action contributed to national authorities drafting laws on key risk factors (drink-driving, helmet use, etc.). Handicap International also contributed to the development by target governments of sustainable funding mechanisms for road safety through capacity building and mutual learning among partners.
- **National networks established and functioning:** National authorities in all the countries where Handicap International has taken action have established a National Road Safety Committee (NRSC) supported by Handicap International. These committees are instrumental in national coordination of road safety measures.



- **Adapted road safety strategies designed to include actions to reduce road crashes:** Handicap International has in all the countries where it has taken action contributed to the drawing up by the national authorities of a National Action Plan (aligned with the UN Decade of Actions for Road Safety 2011-2020). This is the result of Handicap International's technical support and participation in international platforms on road safety, e.g., the United Nations Road Safety Collaboration (UNRSC), of which Handicap International is an active and recognised member.
- **Action taken to reduce road crashes and mitigate their severity:** In Vietnam, official police road crash data indicates a reduction of 57% in fatalities during the period 2007 to 2010 in Dinh Quan district and 44% in Thong Nhat District (two districts where Handicap International sponsored activities). In Cambodia, Handicap International's action led to an increase in helmet use in the target zones, from 7% in 2004 to 85% in 2009<sup>29</sup>.
- **Improvement recorded in medical response to reduce trauma of road crash victims:** In Vietnam, a joint Handicap International-Red Cross initiative led to a significant improvement in the provision of first aid at the scene of crashes in the target zones, resulting in speedier and safer transfer of victims to hospitals and health centres.
- **Civil society empowered by inclusion in road safety actions:** In Lao PDR, the "Road Safety Victims Organization" was set up and developed actions to promote and advocate for the improvement of road safety for all.
- **Improved access to safe mobility and transport for people with disabilities:** In Vietnam and Lao PDR, access to driving licences and safe mobility for people with disabilities has been improved through adapted training, research into mobility barriers and awareness and advocacy actions implemented in cooperation with civil society.

When properly implemented, road safety interventions can result in a significant reduction in the number of road crashes, as illustrated by the field initiatives instituted by Handicap International. Drawing on its experiences in anti-mine action, Handicap International has built robust capacities in advocacy, database management, education and awareness-raising methodologies and this knowledge is now applied to its road safety projects.

## C

### Handicap International's added value

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Road safety, especially in developing economies, is in its infancy, and many gaps need to be addressed in order to reduce crashes, deaths and injuries on the roads. Road crashes are still considered by many as the price to pay for development and access to infrastructure. As a result of numerous other recognised public health challenges such as HIV-AIDS and access to safe drinking water and sanitation, road traffic crashes have only recently come to be highlighted by international donors and governments in developing economies as a critical public health and development issue. Due to limited resources, little sustainable action has as yet been taken<sup>30</sup>. Hopefully, this is set to change with the inclusion of road safety in the upcoming Sustainable Development Goals.

There is thus considerable scope for Handicap International to improve road safety in such countries. Handicap International's added value lies in that it is currently one of the few NGOs of international reach to put road safety firmly on the development agenda. Furthermore, Handicap International advocates for safety measures to protect vulnerable road users who otherwise have very limited capacity for lobbying and social inclusion when injured or disabled.

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To date, Handicap International has made a significant contribution to the development of National Road Safety Action Plans, establishing National and Provincial Road Safety Committees and drafting and approving traffic legislation in Lao PDR, Cambodia, Vietnam, Republic Democratic of Congo and Benin. Thanks to its several years of experience in road safety, Handicap International is now recognised by governments, the private sector and civil society organisations as a leading NGO in the field. Moreover, other national and international road safety stakeholders regard Handicap International as a credible partner for instituting road safety initiatives and providing technical advice and support with project implementation and policy-making.

## D

### Beneficiaries

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**Vulnerable road users:** Handicap International's road safety programmes target the general population, but vulnerable road users require particular attention. This category includes "road users most at risk in traffic such as pedestrians, cyclists and public transport passengers. Children, older people and people with disabilities may also be included in this category."<sup>31</sup> Furthermore, people living near roads and streets with heavy traffic are especially vulnerable.

**School children (aged 5 to 14 years) and teachers:** Road traffic injuries are the second cause of injury and death among 5 to 14 year-olds. Approximately 10 million children are injured or disabled annually on roads. Our activities enable school children to receive Road Safety Education (RSE). Education ministries, pedagogical departments and teachers are directly involved in the process of raising awareness and educating on road dangers and safe road behaviour.

**Young people (aged 15 to 29 years):**

Considering that road crashes are the principal cause of death among young people globally, Handicap International develops a strategy specifically adapted to this age group using a peer-to-peer and participative approach.

**People living near main roads:** Community-based road safety directly benefits populations living near main roads. Often unprepared for the rapid development of road infrastructure, some people lack knowledge and skills regarding safe road behaviour and are frequently unaware of the most basic safety measures. Thus these communities should be involved in drawing up specific road safety plans to institute efficient measures at the local level. Motorcyclists and other vulnerable road users receive information on drink-driving, speed limits, visibility issues, behaviour that can lead to crashes and on how to improve safety (helmet and seatbelt use, etc.).

**Handicap International's road safety**

**partners:** As the main beneficiaries of Handicap International's training and technical support and capacity-building initiatives, all actions directly benefit national and local government and civil society road safety stakeholders.

**People with disabilities:** They benefit directly from an inclusive access to roads and related services such as driving licenses and technical modifications to their vehicles.

**Victims of road traffic crashes:** They receive emergency first aid at the site of crashes. The seriously injured should have access to specialist emergency treatment and transfer to appropriate healthcare facilities as well as referral to other services such as rehabilitation, psychosocial support and livelihood activities, when available.

**The rest of the population (indirect beneficiaries):** They benefit from public awareness-raising initiatives delivered in mass media campaigns (TV, radio and print media).

# Principles of intervention

## A

### Strategic partnerships

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As a cross-disciplinary and cross-sectorial issue, road safety cannot be achieved by one organisation alone and Handicap International is aware that effective partnerships are crucial to the success of its work in road safety. While partnerships vary between countries, it is assumed the objectives and strategies for establishing and maintaining them are common to all Handicap International road safety interventions.

**Government institutions:** Handicap International views partnerships with government institutions as essential to delivering road safety interventions. Handicap International's strategy sets out that building government capacity and cooperation in developing a road safety policy framework is key to the long-term sustainability of road safety in its countries of intervention. Consequently, Handicap International endeavours to establish partnerships with relevant government departments for each area of intervention. Partnerships should include, but not be limited to, road safety committees and similar organisations, ministries, traffic police, health officials and provincial/municipal/local authorities. The goals of these partnerships are to enhance the capacity of government agencies to manage and coordinate road safety and deliver appropriate, inclusive, effective and sustainable road safety interventions. Partnerships with government institutions should be regularly assessed, based on the various governments' ownership of and commitment to road safety.

**Civil society organisations (CSOs):** Local organisations work closely with target populations and have a pertinent understanding and analysis of needs.

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Therefore, Handicap International identifies and establishes partnerships with committed and effective local organisations to implement road safety activities in targeted areas.

The organisation also provides them with appropriate capacity building to give them the tools to design and lead their own road safety interventions and take over their management when Handicap International phases out its projects. Partnerships can be established with international and local non-government organisations, organisations representing road crash victims or people with disabilities and community associations as well as with other relevant coalitions, networks and institutions.

**Private sector:** The private sector plays an important and diverse role in road safety. At national level, it is typically involved in raising awareness to road safety issues, sponsoring events and promoting and improving fleet safety. At international level, it may contribute as donor or sponsor of road safety campaigns and events as it seeks to become more involved in global road safety policy. Handicap International is receptive to establishing partnerships with certain private companies, organisations and industries, but only if they are not seen to be in conflict with Handicap International's mission, mandate and values or the goals of its road safety programme. Prospective partnerships should be assessed and discussed on a case-by-case basis using a set of criteria defined by Handicap International.

**Research institutions:** The lack of quality road safety research in low- and middle-income countries is a major gap in road safety. Handicap International has therefore prioritised research to provide a more in-depth understanding of the issues, improve development of internal strategies and actions based on real needs, boost the level of research skills among local personnel and assist Handicap International's government partners with policy-setting and decision-making. Furthermore, partnerships with research institutions afford Handicap

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International staff and its partners opportunities to access quality training.

So, Handicap International endeavours to **promote a sustainable culture** of road safety through fostering networks of organisations from the private sector, civil society and government. The aim of such networks is to develop internal road safety policies within their organisations, act as role models for other organisations and the general public and promote and implement road safety activities.

## B

### Capacity building for government bodies

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Government bodies, particularly National Road Safety Committees (NRSC) when they exist, are key to managing road safety. Working with them is core to Handicap International's strategic approach of generating ownership and sustainability. Handicap International believes that direct and lasting financial and technical support to government institutions enable them to plan, implement, monitor and evaluate appropriate and effective road safety interventions, and to enhance their ability to fulfil effectively their roles and responsibilities over the long-term.

Capacity-building activities may include technical support with:

- developing long-term road safety strategies, policies and plans,
- professional development in road safety management and coordination,
- developing knowledge and expertise in critical road safety topics through training,
- developing national awareness campaigns,
- data collection and analysis,
- managing databases,
- law enforcement,
- first aid,
- fundraising, etc.

The main objective is to ensure that the NRSC or other relevant government bodies, as Ministries, are capable of developing their national road safety action plan and coordinating and managing the implementation of interventions with other stakeholders and provincial authorities. Handicap International also supports government agencies with developing and maintaining country-level road crash database systems. These systems allow them to better understand the status of road safety and plan appropriate responses as well as to monitor and evaluate the impact of initiatives. In addition, studies on specific topics should be implemented to complement quantitative data generated from the information system. Otherwise, Handicap International advocates with the relevant government agencies to ensure that the issue of road safety is afforded greater prominence on countries' development and public health agendas.

## C

### Participation of target population

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Handicap International calls on communities in a participatory planning process. The aim is to identify, plan and implement together solutions for local road safety issues. So participation is core to Handicap International's approach to road safety. True involvement implies that beneficiaries are encouraged, guided and supported in order to exert meaningful influence on project content and processes. Expected outcomes of such meaningful participation are open and diverse. They depend not only on people's ideas, needs, interests and priorities but also on the strengths and limitations of their environment. Through active involvement, people are encouraged to assume responsibility for their own safety and lives, manage complexities related to change and participate effectively in social networks for safer road user behaviour.

This participatory approach contributes to develop capacities of local populations, including local organisations, and the implementation of sustainable road safety interventions.

### D

#### Access to services<sup>32</sup>

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Road safety projects have a significant impact on improving access to services in target zones, in particular for vulnerable people, including people with disabilities.

So these projects promote accessibility of public transport and secured transport services. Indeed, Handicap International considers that accessibility of road infrastructure is a basic service for all and in particular for people with disabilities. Road safety interventions also ensure that routes are secure for pedestrians, motorcyclists or cyclists, motor vehicle drivers, and consequently facilitate access for all to health, rehabilitation, education, training, employment services, etc.

Reminder: There are three main types of stakeholders involved in the development, implementation and supervision of these services: public authorities, service providers and users and their families. Access to services is facilitated when these three groups enjoy relationships of collaboration and dialogue. As mentioned previously in this document, road safety interventions of Handicap International aim to work with these actors, but also to make them work together, which allows consolidating a bit more the sustainability of actions.

### E

#### Disability inclusive approach<sup>33</sup>

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Road crashes are a major cause of physical and mental disability worldwide.

Disability is a dynamic process that “results from the interaction between people with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others,” (CRPD, 2006). This definition of disability, which is further elaborated by the Disability Creation Process<sup>34</sup> endorsed by Handicap International, explains disability as the interaction between personal and environmental factors stemming from causes and consequences of disease, trauma and other disruptions to a person's integrity and development, with strong emphasis on social participation.

Moreover, “according to the Disability Creation Process, a disabling situation corresponds to the lack of, or reduced, realization of life habits, i.e. of daily activities or of a social role valued by the person or his/her socio-cultural context according to his/her characteristics (age, sex, socio-cultural identity, etc.) and which ensures his/her survival and well-being in his/her society.”<sup>35</sup> As such, environmental factors may constitute either facilitators or obstacles with regard to an individual's life habits. Handicap International, through its work in road safety, aims to make a substantial contribution to the removal of barriers by taking action on environmental factors on the one hand, and risk factors at the personal level on the other.

In order to better guide project development and implementation, and more specifically to operationalise these broader concepts of disability, Handicap International relies on a development model promoting equality and full social participation at the grassroots level: inclusive local development<sup>36</sup>. It enables people with disabilities to enjoy the same rights as any other member of society and to be sources of knowledge and expertise

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regarding the design and implementation of policies while ensuring that development policies, programmes and projects are designed and evaluated taking into account their impact on the lives of people with disabilities as well as those of the wider community.

Ensuring this approach requires mainstreaming disability in road safety at all levels, whereby the concerns and experiences of people with disabilities are integral to the design, implementation, monitoring and evaluation of road safety policies and programmes in all political, economic and societal spheres. It is essential when adopting a disability mainstreaming approach to road safety to assess, implement and monitor project activities through a lens of cross-impairment. In concrete terms, this requires road safety projects to take conscious and planned measures to address barriers systematically and promote facilitators for women and men with all types of impairments - physical, sensory, intellectual and mental - and at all levels - services, community, attitudes, policy and environment.

implementing different levels of intervention. This allows better identification of the links between gender and behaviour risks and help project teams to better understand observable gender differences in road crashes and adjust their intervention strategies accordingly. To improve gender policies and practices, Handicap International promotes the following:

- Analysis of the factors leading to a higher fatality rate among males than females
- Inclusion of the gender perspective in all research activities
- Development of awareness-raising strategies that are gender-specific and -sensitive
- Dissemination of information on risk factors that take account of gender difference
- Recognition of vulnerable road users' specific gender needs
- Inclusion of gender in training programmes
- Assessment of specific needs of women/ girls and men/boys with disabilities in their access to safe mobility and their risk-taking behaviour patterns.

## F

### Gender-inclusive approach

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According to road safety statistics, it appears that young males are more likely to be involved in road traffic crashes than females. More than three-quarters (77%)<sup>37</sup> of all road traffic deaths occur among men while young male drivers under the age of 25 years are almost three times as likely to be killed in car crashes as young females. Worldwide, males are more inclined to risk-taking and sensation-seeking behaviour and are also more likely to overestimate their abilities. Young males take more risks, are more likely to drive at excessive or inappropriate speeds and are less likely to use a helmet or seatbelt. Handicap International's road safety strategy is committed to integrating gender by



# Linkages to other sectors

## A

### Universal accessibility

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Universal accessibility means appropriate access for all users to all services. These services include housing, roads, transport, public spaces, buildings, information, communication and facilities available to the public. By users, we consider all those who wish to use or who use these services, including people with disabilities and anyone with reduced mobility (e.g. older people, pregnant women, children, people carrying heavy loads, etc.).

The notion of accessibility must necessarily be based on the concept of the unbroken chain of movement and human safety. The links between accessibility and road safety then seem obvious, inseparable and indispensable. Universal accessibility provides standards and/or adaptations for urban development in terms of road safety. For example, to facilitate the use of public transport by people with disabilities irrespective of the type of impairment, the following must be taken into account:

- Flat, even, asphalt pavements must be non-slip (tactile paving surfaces). Slopes must be at an appropriate angle with tactile strips and street furniture carefully located. In all cases, they should comply with universal design principles to create a user-friendly environment for people with disabilities.
- Speed bumps upstream and downstream of pedestrian crossings should be equipped with curved ramps, warning strips and road markings, such as white or tactile strips and bands.
- Buses should be adapted for people with different impairments and equipped with an inboard audio and visual system to provide information about stops. The central door should be equipped with a removable ramp clearly identified to users by means of a pictogram. Bus stops

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should be announced in a clearly audible manner and information provided on the itinerary. Shelters made of acrylic glass or glass should be indicated with horizontal coloured strips and platforms with coloured edges for better visibility.

## B

### Rehabilitation

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According to WHO, for every one person who dies in a road traffic crash, many more are left with permanent impairments<sup>38</sup>. A study<sup>39</sup> conducted in France reports that one out of three people injured on the road lives with a long-term impairment - 54% to the head, 26% to the lower limbs and 17% to the spine. Hence, "rehabilitation services are an essential component of the comprehensive package of initial and post-hospital care of the injured people. They help minimize future functional impairments and restore as much as possible people's functional capacities. The importance of early rehabilitation has been proved; though good practice related to treatment programmes have yet to be identified. Most countries need to improve the capacity of their health care systems to provide adequate rehabilitation to road crash victims."<sup>40</sup>

More specifically, early rehabilitation services are necessary to avoid severe complications and/or mitigate their impact on future permanent impairments. Most consist in measuring the functional status of injured people, screening functions that may be affected (nerves, muscles, joints and bones), and providing appropriate advice to the person and his/her family on positioning, transfer, mobility and exercise. Psychosocial advice should always accompany these services in order to provide support to victims and their caregivers. Lastly, adapted wheeled mobility devices should be included in the rehabilitation process in order to promote the greatest possible functionality and autonomy. These services should consistently be an



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integral part of the comprehensive approach to care and follow-up of people injured in road crashes. Long-term rehabilitation is key to supporting individuals in achieving an optimal level of functioning, including through the provision of assistive devices and technologies, and ultimately facilitating participation in society. Staff responsible for this process should be informed and trained on a regular basis.

## C

### Disaster risk management

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A risk is the probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human induced hazards, the vulnerability conditions and the capacities of the group concerned". Hazard is defined as "a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental"<sup>41</sup>. Hazards can be of natural origin or related to environmental and technological dangers and risks. Handicap International currently focuses its Disaster Risk Management (DRM) interventions on natural disasters. Key development stakeholders also consider road safety a major disaster. In practice, DRM and road safety share numerous strategies, methodologies, interventions and objectives to decrease risks to vulnerable communities through interventions such as risks assessments and mapping, capacity building of local initiatives, risk education in schools, awareness campaigns, community-based risk reduction and first aid. In some environments, key partners for implementation are common to both, for example, the Red Cross through its provision of first aid services.

## D

### Public health and the environment

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The environmental impact of roads includes immediate effects such as noise and water pollution, habitat destruction/disturbance and reduction in local air quality while wider effects may include climate change, for which vehicle emissions are in part responsible. The design, construction and management of roads, vehicle parking and other such facilities and the conception and regulation of vehicles can modify these impacts to varying degrees. Health loss resulting from the combined effects of road injuries and traffic pollution is substantial across all regions. While deaths caused by road transport are mainly due to road injuries in low-income regions such as sub-Saharan Africa, health loss due to vehicle emissions tends to be highest in wealthier regions - Western Europe, for example<sup>42</sup>. Motor vehicle pollution is responsible for 184,000 deaths globally - 91,000 from ischemic heart disease, 59,000 from strokes and 34,000 from lower respiratory infections, chronic obstructive pulmonary disease and lung cancer.

Handicap International promotes through its road safety strategies an approach to transport that takes into account the environmental impact. In promoting environment-friendly transportation, Handicap International supports the development of safe public transport, bicycles and walking to help limit greenhouse gas emissions and positively impact the health of road users. In addition, road safety projects are often committed to reducing printed Information, Education and Communication (IEC) resources by using social media to communicate on behaviour change.



Vietnam, 2015

# Intervention methods

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# Pillar 1-Road safety management: Increasing the capacity of stakeholders to implement road safety actions

## A

### Data collection and analyses

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Road safety funding and actions, decision-making, policies and strategies are usually developed and implemented based on evidence gathered using comprehensive and accurate data collection systems. This collection and analysis action aims to provide road safety stakeholders with comprehensive and accurate data on road crashes and victims. The data collection system should be created under the responsibility of the existing state network (Ministry of Interior, Ministry of Health or National Road Safety Committee). Handicap International plays a lead role in developing and piloting databases for a given duration, especially in low- and middle-income countries with sub-optimal or poorly functioning road safety systems. Once fully operational, responsibility for the database is gradually handed over to relevant government institutions, along with capacity building and skills transfer.

**Target:** The Road Crash and Victim Information System (RCVIS) enables the distribution of road crash and casualty reports to all local and international stakeholders involved or with an interest in road safety issues.



### Sample of indicator

Accurate and comprehensive knowledge and data on road crashes and victims are available to the government and stakeholders for analysis, planning and evaluation of road safety actions by year X.

## B

### Support and implementation of research

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While quality research is required to complement quantitative information generated from road crash data, this is lacking in most less-developed countries. However, this action is important to develop research into the factors responsible for road traffic crashes to support civil society stakeholders with advocating for policy change in road safety and decision-makers in taking informed and needs-based initiatives. It also aims to promote the setting up of in-country permanent research teams to work under the NRSC or universities through the provision of capacity building to local teams. Handicap International seeks cooperation with regional and international institutes such as the Institute for Mobility, Global Transport Knowledge Practices, Road Traffic Injuries Research Network and the Global Road Safety Partnership for their international research expertise and to enhance capacity building among local teams.



## Key topics

- **Sociological analyses:** In order to develop relevant road safety strategies for education and awareness campaigns adapted to the particular sociological context of Handicap International's countries of intervention, knowledge derived from scientific research (particularly with regard to driving behaviour) must be developed.
- **Links between disability and road traffic crashes:** Research is still required to strengthen evidence on the intersection between global disability prevalence and road crashes.
- **Access to safe mobility and transport for people with disabilities:** There is a lack of information in many countries on the main barriers people with disabilities face in accessing safe and appropriate transport. More information helps to better understand how access to transport can impact their ability to access education, health services and employment and participate fully in the community.
- **Assessments and good practices:** It is crucial to assess and evaluate the impact of Handicap International's awareness activities and identify and promote good practices.
- **Impact of road crashes** on household incomes and the national economy should be examined.
- **Traffic and economic development:** In many countries main roads are designed to meet the needs of transportation and haulage companies, which often leads to significantly higher speeds and consequently more crashes. Reliable data is required on this issue.
- **The impact of policies** promoting the use of safe and accessible public transport on the number of road crashes has not yet been researched.

**Target:** Members of national and provincial road safety committees, civil society, universities and research institutes.



## Samples of indicators

- Research results and recommendations are disseminated to all local, national and international stakeholders.
- Stakeholders draw on road safety research data and information in their decision-making and design of road safety actions.

## C

### Support to road safety committees and government partners

Handicap International provides funding to government partners for the technical and financial support required to develop and coordinate National Road Safety Action Plans. Enhancing the capacity and skills of government staff, this enables them to gradually take over management of databases, organisation of public awareness-raising events and implementation of school road safety education programmes, etc. Handicap International also seeks to address a critical gap in traffic law enforcement by contributing to the capacity of the NRSC and Ministry of Interior to coordinate and advocate for the implementation of road traffic regulations. If necessary, Handicap International channels donor funds to developing enforcement strategies, action plans and training.

**Target:** National and local government partners - the main beneficiaries of Handicap International's technical support and training.





### Samples of indicators

- A government action plan exists at the national and provincial level by year xx.
- A national committee for the coordination of road safety is functional by year xx.
- The competencies and capacities of government institutions to manage, implement and coordinate effective road safety actions are improved by xx% from baseline to end of project.
- Legal responsibilities in matters of road safety are decentralised to provincial or district levels by the end of the project.
- Platforms for interaction among road safety stakeholders are functional by year xx.



### Samples of indicators

- CSOs are set up so as to ensure their own democratic and sustainable management.
- CSOs raise awareness of the population and road safety stakeholders.
- CSOs in the target countries are consulted by their NRSCs on issues relating to road safety.

## D

### Support to civil society organisations

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Handicap International partners with local CSOs involved in road safety and more particularly with those representing victims of crashes. Handicap International prioritises organisational empowerment and capacity building to enable such organisations to deliver awareness and advocacy initiatives.

At the global level, Handicap International partners with other like-minded civil society stakeholders and contributes actively to international networks and coalitions to enhance road safety actions and advocate for road safety.

**Target:** National and local CSOs - the main beneficiaries of technical support and training provided by Handicap International.

# Pillar 2-Safer roads and mobility: Improving road safety and access to safe mobility and transport for all

## A

### Road safety engineering

---

Road safety engineering contributes directly to reducing the risk of road crashes by implementing safe road design. This requires substantial financial investment and specific engineering skills that are costly, both well beyond the scope and means of Handicap International. Moreover, large international organisations such as the World Bank, Asia Development Bank, Australian Agency for International Development and Japan International Cooperation Agency and other bilateral donors provide adequate long-term funding for road infrastructure projects. Therefore, Handicap International focuses its efforts in this area on lobbying relevant donors and government authorities to include road safety in their planning and design of road infrastructure and incorporate the needs of vulnerable road users such as pedestrians, people with disabilities, cyclists and children to reduce the risk of crashes. The organisation also supports the professional development of road safety engineers by facilitating and organising relevant training in topics such as road safety auditing and remedying of black spots. It also ensures mechanisms are in place to afford engineers access to road crash data to enable them to establish and better understand the location of crashes on road networks.

**Target:** Ministry of public works and transport personnel in charge of road design and urban planning.



### Samples of indicators

- Ministry of Transport personnel have enhanced capacities to design roads that comply with international road safety standards and include universal accessibility.
- Ministry of Transport personnel have enhanced capacities to identify and remedy black spots.
- Road design applies safety and universal accessibility standards.

## B

### Access to safe mobility and transport for all

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This action aims to improve safe mobility for all, especially people with disabilities who face significant barriers in the transport system. Much emphasis is placed on accessibility and safety when designing measures to ensure the safety of the most vulnerable road users. By analysing the obstacles and facilitators to accessibility, Handicap International seeks to provide recommendations on reasonable accommodation and adaptation while supporting universal design that improves access and safety for all road users. Research and advocacy for safer road environments take into account factors relating to the access, needs and safety issues of people with disabilities, the design and manufacture of adapted vehicles for people with disabilities and the institution of an appropriate driving license testing system to afford people with disabilities access to a legal driving licence and consequently insurance coverage. Furthermore, promoting an inclusive transportation information system should be envisaged as this is key. These actions should consistently be planned, implemented and evaluated in close



## Pillar 2

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cooperation with organisations representing people with disabilities.

**Target:** People with disabilities benefit directly from a more inclusive transport system and urban planning policies. This improves safer mobility and provides an accessible public transport system, access to driving licenses for 3-wheel motorcycles, adapted cars for people with disabilities and technical modifications to their vehicles.



### Samples of indicators

- Number of transport stakeholders with access to appropriate information on barriers faced by people with disabilities in the transport system and enhanced capacities to remove these barriers.
- Development of safe and inclusive mobility action plan based on accessibility and safety audits available by year xx.
- Number of people living with disabilities reporting improved access to mobility in the transport system at the end of the project.

## Pillar 3-Safer vehicles: Advocating for appropriate safety standards

While Handicap International is not directly involved in improving technical standards for vehicles, the organisation recognises the importance of improving vehicle safety standards and thus advocates for governments to apply and enforce vehicle safety regulations.

**Target:** Handicap International's advocacy targets governments and more particularly Ministries of Trade to define standards for imported vehicles and Ministries of Transport to establish technical controls for vehicles.



### Sample of indicator

- Technical requirements for vehicles and road safety accessories are established, implemented and updated by relevant ministries by year xx.

# Pillar 4-Safer road users: Improving safe driving knowledge, attitudes and behaviour

## A

### Road safety education

---

Further to WHO's recommendation on associating road safety education and awareness with enforcement<sup>43</sup>, Handicap International is involved in school and university road safety programmes. This action aims to deliver effective and practical road safety education programmes to primary school, secondary school and university students to improve road safety behaviour. Handicap International supports the appropriate government partner (Ministry of Education) with developing and instituting school road safety programmes, as well as co-funding and co-organising associated training. Once validated, the programmes are implemented by the relevant government institutions.

**Target:** School children and teachers: RSE training is provided to students (primary school, secondary school, university). Education ministries, pedagogical departments, teachers and parents participate actively in the process of educating and raising awareness to road dangers and safe road behaviour.



### Samples of indicators

- Road safety education programmes are validated by Ministry of Education by year xx.
- Teachers have increased their capacities to implement Road Safety Education activities by xx% from baseline to end of project and are provided with support from Ministry of Education pedagogical units by year xx.
- Number of road safety programmes implemented using participative and dynamic teaching methods and relevant tools in target zones.
- Students' level of knowledge of safe driving, attitudes and behaviour improved by xx% from baseline to end of project.
- Number of parents' associations including road safety in their strategies and action plans.
- Areas around schools and universities in the target zones are upgraded to safe traffic zones by year xx.
- Number of school administrations designing, implementing and monitoring road safety regulations in internal policies.

## B

### Public awareness of road safety

---

Handicap International works closely with governments and civil society partners to implement public awareness-raising initiatives on particular issues of road safety via mass media campaigns, targeted awareness actions and management of a road safety network, i.e. a network of organisations and companies that have adopted workplace policies on road safety. Adapted to each specific context, these campaigns are sensitive to culture, gender and disability. Handicap International

initiates and institutes standard awareness-raising campaigns via TV and radio, posters and flyers while providing capacity building to government and civil society partners to enable them to progressively take over their management and organisation. In addition, Handicap International strengthens cooperation between all road safety stakeholders by encouraging them to secure the necessary resources to develop and implement awareness campaigns and associated events. Awareness-raising campaigns increasingly call on road safety research in order to devise effective messages based on high quality evidence. In so doing, optimum effectiveness of awareness campaigns is gradually achieved by ensuring all stakeholders deliver consistent road safety messages.

**Target:** Vulnerable road users. Handicap International's road safety programmes are aimed at an entire population, but the needs of vulnerable road users call for specific attention. This category includes road users most at risk in traffic: pedestrians, cyclists, public transport passengers, people with disabilities, children and older people. People living near busy roads and streets are also particularly vulnerable.



### Samples of indicators

- Level of knowledge of safe driving, attitudes and road user behaviour increased by xx% from baseline to end of project.
- Crashes related to drink-driving decreased in target zone by xx% from baseline to end of project.
- Helmet use increased in target zone by xx% from baseline to end of project.

## C

### Network of employers for traffic safety

International Labor Organization (ILO) statistics confirm that road crashes are one of the main causes of occupational accidents and injuries and, as such, road safety is one of ILO's strategies for Preventive Occupational Safety<sup>44</sup>. Handicap International supports occupational safety by setting up or supporting existing networks of employers for traffic safety. Members of road safety networks draw up and commit to enforcing their internal road safety policies and are invited to designate a road safety representative from among their staff to monitor the implementation of the policy within their organisations. The policy includes safe behaviours such as helmet and seatbelt use, driving licenses, regular eye check-ups, third-party liability, etc. So Handicap International seeks to promote a **road safety culture** by fostering this network.

**Target:** Haulage and passenger transport companies, national and international non-governmental organisations, United Nations agencies, international organisations, governmental authorities and private companies working together to promote road safety within their own organisations and the wider community.



### Samples of indicators

- Number of organisations with upgraded internal policies complying with road safety standards by the end of the project.
- Level of use of protective devices (helmet, seatbelt, etc.) among employees of target organisations increased by xx% from baseline to end of project.

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## D

### Community-based road safety

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Community-based actions aim to increase road safety awareness in villages along main roads. Handicap International empowers local authorities and non-governmental organisations to work with communities in developing and implementing local solutions to road safety issues identified through participatory planning processes such as local ownership, capacity building and linkage to civil society and local authorities. This allows ensuring sustainability of road safety awareness and actions in such communities.

**Target:** People living near main roads. Community-based road safety directly benefits people living near main roads. Such people are often unprepared for the rapid development of road infrastructure, lack knowledge and skills regarding safe road behaviour and are frequently unaware of the most basic safety measures. These communities thus have a direct role to play in drawing up specific road safety plans to institute measures at the local level. Motorcyclists and other vulnerable road users receive information on drink-driving, speed limits, visibility issues, behaviour that can lead to crashes and on how to improve safety (helmet and seatbelt use, etc.).



#### Samples of indicators

- Number of vulnerable community members improving their knowledge of main risk factors on roads.
- Number of communities that have developed and implemented a road safety action plan.

## E

### Traffic law enforcement

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To be effective, actions in education and awareness-raising should also be associated with other measures, enforcement in particular. Handicap International believes that once knowledge of road safety rules is enhanced, improving enforcement can modify dangerous road user behaviour substantially and lead to a reduction in road traffic crashes. So Handicap International seeks to associate its actions in education and awareness-raising and public knowledge, acceptance of road safety and enforcement of traffic regulations. While recognising that effective traffic law enforcement is fundamental to improving road safety, Handicap International does not participate in any actions associated with policing enforcement of traffic laws (for example, openly partnering with police at checkpoints). As such, while cooperating with them in promoting law enforcement for safer road behaviour, Handicap International remains neutral in its relations with the police.

**Target:** Handicap International provides capacity building and advice to traffic police to improve their enforcement actions. These may include facilitating professional development in effective enforcement, delivering strategic advice and support, developing partnerships in education and awareness projects and donating equipment and resources.



#### Samples of indicators

- Enforcement of road traffic law/rules increased by xx% from baseline to end of project.
- Police have set up mechanisms to regulate traffic and penalise traffic offences by year xx.

# Pillar 5-Post-Crash Response: Reducing road crash victims' trauma

The probability of dying from serious injuries sustained in a traffic crash is much higher in low- and middle-income countries because of inadequate first aid provision at crash sites, slow transport times to hospitals and lack of requisite medical skills at hospitals and health centres. "Worldwide studies have shown that death was potentially preventable in a large proportion of those who died as a result of road crashes before they reached hospital"<sup>45</sup>. According to WHO, "the aim of post-impact care is to avoid preventable death and disability, to limit the severity of the injury and the suffering caused by it, and to ensure the crash victim's best possible recovery and reintegration into society"<sup>46</sup>.

Handicap International is active in improving first aid and ambulance services for crash victims and develops actions to improve the capacity of local police, Red Cross, community volunteers, ambulances crews, etc. The aim is to deliver first aid to road crash casualties, refer them to appropriate health facilities and rehabilitation services. Within this range of activities, support is provided with incorporating first aid training into school curricula. Furthermore, when available, Handicap International promotes referral to psychosocial support and basic rehabilitation services as an extension of the immediate response. Otherwise, Handicap International institutes pertinent emergency systems at community level.

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## Target:

- People injured in traffic crashes, who receive emergency first aid at the site of the crash
- The seriously injured people benefit from specialist emergency treatment and safe transfer to appropriate health facilities, as well as referral to other services such as rehabilitation, psychosocial support and livelihood activities, when available locally
- Members of first aid networks, who receive appropriate training and equipment.



## Samples of indicators

- First aid networks are set up in the target zones by year xx.
- Number of volunteers having received appropriate first aid training by year xx.
- First aid protocols developed and applied in the target zones by year xx.
- % of victims benefiting from appropriate first aid at crash sites increased from X% to X% within a set period of time.

# Perspectives for next five years

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Handicap International plans to extend its road safety interventions to other regions of the world: Sub-Saharan Africa, Latin America and the Caribbean within the next five years and to scale-up interventions for durable action and change in Southeast Asia.

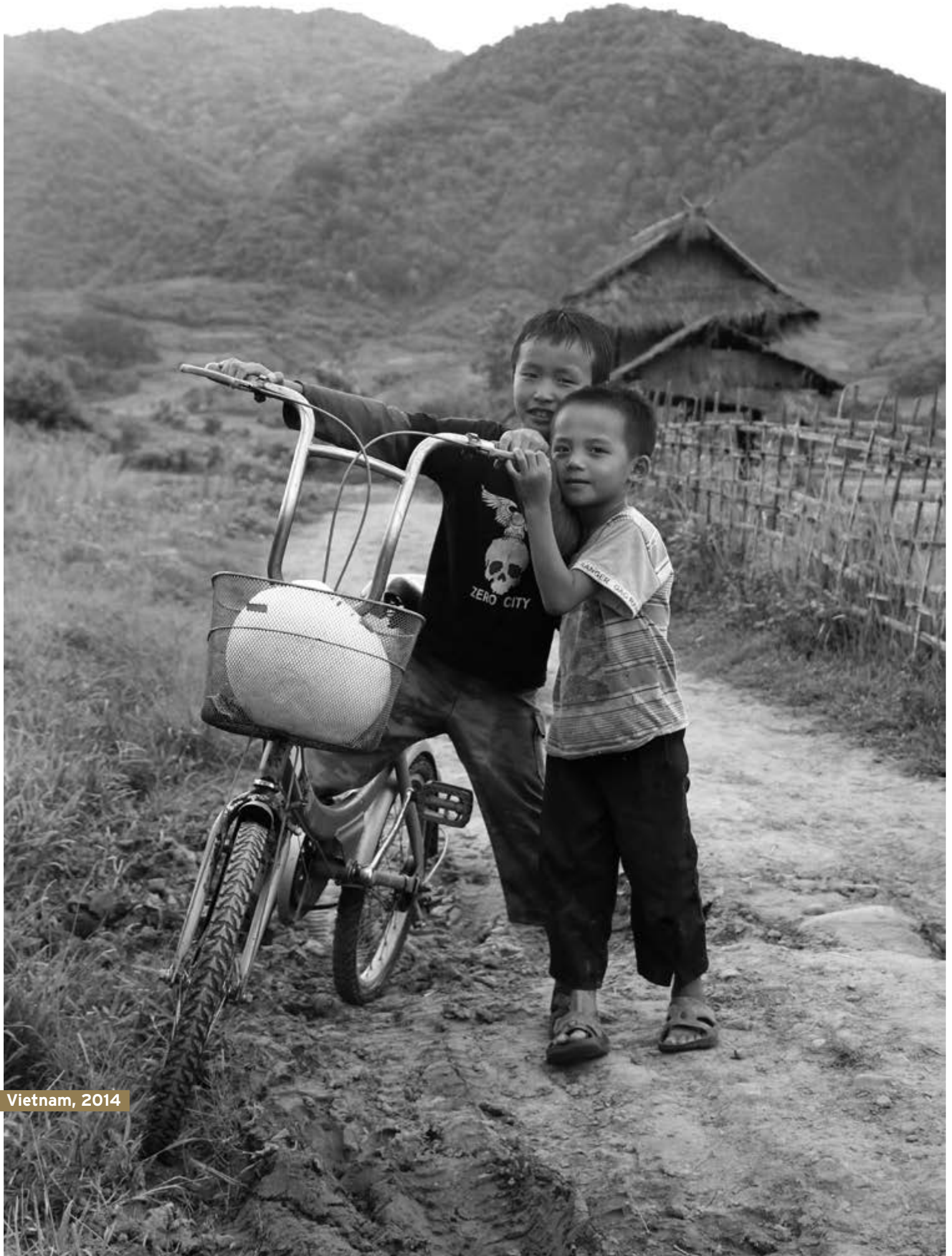
Handicap International also plans to:

- Increase its contribution to the Decade of Action for Road Safety (2011-2020) and the Sustainable Development Goals (#3.6/#11.2).
- Establish constructive partnerships with research institutes and universities to develop quality and robust evidence collection in order to inform policies.
- Increase technical and operational linkages between road safety, universal accessibility, rehabilitation and psychosocial support.
- Enhance the capacities of civil society organisations in low- and middle-income countries to contribute to road safety initiatives and policies.
- Enhance Handicap International's presence and influence in global health and road safety networks.
- Influence decision-making processes at both local and international level to ensure policies address road safety issues adequately, with particular emphasis on vulnerable road users.









Vietnam, 2014

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## Some elements to establish a logical framework<sup>47</sup>

**General objective: To contribute to reducing the health, social and financial impact caused by road crashes at national level**

**Specific objective: To decrease the ratio of road fatalities to motorised vehicles as the number of vehicles increases**

Example of indicator	Example of source of verification
Ratio of road fatalities to motorised vehicles from baseline to end of project	Road Crash and Victim Information System

**Outcome 1: An institutional road safety framework and a national network are established and functioning**

Examples of indicators	Examples of sources of verification
<b>Ind. 1.1.</b> A national committee tasked with coordinating road safety is functioning	<b>1.1.</b> Decrees on establishing official road safety committee
<b>Ind.1.2.</b> The competencies and capacities of government institutions to manage, implement and coordinate effective road safety actions are improved by X% from baseline to end of project	<b>1.2.</b> National committee action plan and reports
<b>Ind.1.3.</b> Legal responsibilities in matters of road safety are decentralised to provincial or district levels by the end of the project	<b>1.3.</b> Decrees on decentralisation process
<b>Ind.1.4.</b> Platforms for fostering interaction among road safety stakeholders are functioning by year X	<b>1.4.</b> Minutes of platform meetings
Examples of activities	
<ul style="list-style-type: none"> <li>➤ Capacity building/training in road safety for government stakeholders</li> <li>➤ Technical support with establishing a permanent inter-ministerial road safety platform and a national operational agency to oversee road safety</li> <li>➤ Technical support with developing an appropriate legal framework</li> </ul>	

**Outcome 2: National strategies are pertinent and designed in such a way that actions can be implemented by road safety stakeholders**

Examples of indicators	Examples of sources of verification
<p><b>Ind.2.1.</b> A government action plan exists at national and provincial level</p>	<p><b>2.1.</b> Government action plan</p>
<p><b>Ind.2.2.</b> Road safety research capacity is enhanced and main risk factors are identified through qualitative analyses</p>	<p><b>2.2.</b> Research reports published and disseminated</p>
<p><b>Ind.2.3.</b> Accurate and comprehensive knowledge and data are available to government and stakeholders for analysis, planning and evaluation of road safety actions by year X</p>	<p><b>2.3.</b> Data collection reports published and disseminated</p>
<p><b>Ind.2.4.</b> Inclusive mobility policies are included in national road safety strategies</p>	<p><b>2.4.</b> National mobility policies drawn up by Ministry of Public Works and Transport</p>
Examples of activities	
<ul style="list-style-type: none"> <li>■ Technical support with the development of a permanent Road Crash and Victim Information System (RCVIS) database or the inclusion of road crash data in a Global Injury Surveillance System</li> <li>■ Capacity building/training in data analysis</li> <li>■ Supporting implementation of research into main risk factors, cost analyses, etc.</li> <li>■ Accessibility/safety audit for people with disabilities</li> <li>■ Capacity building in development of evidence-based action plans at central and provincial level</li> </ul>	

**Outcome 3: Road users adopt lower risk-taking behaviour due to dissemination of culture of road safety among the population, (vulnerable road users in particular), and implementation of appropriate enforcement strategies**

Examples of indicators	Examples of sources of verification
<p><b>Ind.3.1.</b> Government and civil society road safety stakeholders have enhanced capacities to design, implement and monitor awareness campaigns</p>	<p><b>3.1.</b> Training-needs assessment, report of implementation</p>
<p><b>Ind.3.2.</b> Road user knowledge of safe driving, attitudes, and behaviour are improved by X% from between the start and the end of the project as a result of effective awareness campaigns</p>	<p><b>3.2.</b> Baselines and follow-up</p>
<p><b>Ind.3.3.</b> Crashes caused by drunk drivers decreased by X% in target zones from baseline to end of project</p>	<p><b>3.3.</b> Drink-driving surveys</p>
<p><b>Ind.3.4.</b> Helmet use increased by X% in target zones from baseline to end of project</p>	<p><b>3.4.</b> Helmet use surveys</p>
<p><b>Ind.3.5.</b> Police have implemented mechanisms to regulate traffic and penalise traffic offences by year X</p>	<p><b>3.5.</b> Police reports</p>
<p><b>Ind.3.6.</b> Driving licence legislation is in place and technical requirements for vehicles and road safety accessories are established, implemented and updated</p>	<p><b>3.6.</b> Legal framework</p>
Examples of activities	
<ul style="list-style-type: none"> <li>▀ Capacity building/training in awareness campaign strategies</li> <li>▀ Supporting network for the implementation of evidence-based awareness campaigns on main risk factors</li> <li>▀ Capacity building/training of traffic police in enforcement strategies</li> </ul>	

Outcome 4: Road safety is integrated into the national education framework, and implemented in schools and universities with support from parents' associations	
Examples of indicators	Examples of sources of verification
<b>Ind.4.1.</b> Teachers have increased their capacity to implement Road Safety Education activities by xx% from baseline to end of project and are provided with support from Ministry of Education pedagogical units by year xx	<b>4.1.</b> Reports drawn up by Ministry of Education
<b>Ind.4.2.</b> Road safety education programmes are validated by Ministry of Education by year xx	<b>4.2.</b> Decrees on official validation of road safety education programmes
<b>Ind.4.3.</b> Number of road safety programmes implemented using participative and dynamic teaching methods and relevant tools in target zones.	<b>4.3.</b> Reports drawn up by Ministry of Education on monitoring programme implementation process
<b>Ind.4.4.</b> Level of students' knowledge of safe driving, attitudes and behaviour increased by X% from baseline to end of project	<b>4.4.</b> Pre- and post-tests
<b>Ind.4.5.</b> Number of parents' associations including road safety in their strategies and action plans	<b>4.5.</b> Parents' associations action plans
<b>Ind.4.6.</b> Areas around schools and universities in the target zones are upgraded to safe traffic zones by year xx	<b>4.6.</b> Small-scale school safety audits
<b>Ind.4.7.</b> Number of school administrations designing, implementing and monitoring road safety regulations in internal policies	<b>4.7.</b> Internal school policies and/or Ministry of Education decrees
Examples of activities	
<ul style="list-style-type: none"> <li>▀ Development of road safety modules to be integrated into the national curriculum</li> <li>▀ Training of teachers on implementing road safety modules in their schools is applied</li> <li>▀ Supporting implementation of road safety modules using participative and dynamic teaching methods and relevant tools</li> <li>▀ Supporting parents' associations with developing road safety action plan strategies</li> <li>▀ Conducting road safety audits in areas around schools and universities</li> <li>▀ Capacity building/training of school administration representatives in the design, implementation and monitoring of road safety rules in their internal policies</li> </ul>	

### Outcome 5: Provision of appropriate and timely medical response to reduce trauma of road crash victims

Examples of indicators	Examples of sources of verification
<b>Ind.5.1.</b> Emergency case-management procedures are established and complied with by health stakeholders	<b>5.1.</b> Emergency procedures, guidelines and reports
<b>Ind.5.2.</b> First aid network is set up and functioning	<b>5.2.</b> Network evaluation reports
Examples of activities	
<ul style="list-style-type: none"> <li>▀ Development of an appropriate emergency case-management procedures</li> <li>▀ Training health stakeholders in emergency case-management procedures</li> <li>▀ Identifying members for training and provide them with equipment required by first aid networks</li> </ul>	

### Outcome 6: Civil society organisations' advocacy for road safety and victims assistance is improved in target countries

Examples of indicators	Examples of sources of verification
<b>Ind.6.1.</b> Civil society organisations advocating for road safety and improved victims assistance (CSARS) are set up so as to ensure their own democratic, reliable and sustainable management	<b>6.1.</b> Organisational status of civil society organisations advocating for road safety and improved victims assistance (CSARS)
<b>Ind.6.2.</b> CSARS raise awareness of the population and stakeholders to road safety	<b>6.2.</b> Number of awareness interventions in CSARS annual reports
<b>Ind.6.3.</b> CSARS' views on road safety issues are taken into account by NRSC in the target countries	<b>6.3.</b> Minutes of platform meetings on road safety
Examples of activities	
<ul style="list-style-type: none"> <li>▀ Providing institutional support to CSARS with defining their status and operational, financial and administrative procedures</li> <li>▀ Providing technical support to CSARS with designing and implementing pertinent road safety awareness and advocacy actions</li> </ul>	



## Outcome 7: Access to safe mobility and transport for people with disabilities is improved

Examples of indicators	Examples of sources of verification
<p><b>Ind.7.1.</b> Number of transport stakeholders with access to appropriate information on barriers people with disabilities face in the transport system is increased and capacities to remove these barriers improved</p>	<p><b>7.1.</b> Training needs assessment, report of implementation</p>
<p><b>Ind.7.2.</b> Development of a safe and inclusive mobility action plan based on accessibility and implementation of safety audits</p>	<p><b>7.2.</b> Inclusive mobility action plan, accessibility/safety audit report</p>
<p><b>Ind.7.3.</b> Number of people living with disabilities afforded improved access to mobility in the transport system is increased</p>	<p><b>7.3.</b> Number of barriers identified in the baseline study and no longer visible in the follow-up study</p>
Examples of activities	
<ul style="list-style-type: none"> <li>➤ Accessibility/safety audit of current transport system and identification of the main barriers</li> <li>➤ Development of safe and inclusive mobility action plans based on accessibility and safety audits</li> <li>➤ Supporting actions leading to improved access to mobility in the transport system for people with disabilities</li> </ul>	

## Outcome 8: National and international networks and partnerships are strengthened to exchange and capture good practices and share knowledge and lessons learned

Examples of indicators	Examples of sources of verification
<p><b>Ind.8.1.</b> Road safety stakeholders participate regularly in international meetings</p>	<p><b>8.1.</b> Meeting reports</p>
<p><b>Ind.8.2.</b> States integrate international network recommendations into their political strategies</p>	<p><b>8.2.</b> Annual national road safety action plans</p>
Examples of activities	
<ul style="list-style-type: none"> <li>➤ National road safety stakeholders participate regularly in international meetings</li> <li>➤ Help organise workshops for these stakeholders to share international recommendations and integrate innovation into their strategies and action plans</li> </ul>	

## Acronyms

<b>CRPD</b>	Convention on the Rights of Persons with Disabilities
<b>CSARS</b>	Civil society organisations advocating for road safety and improved victims assistance
<b>CSOs</b>	Civil Society Organisations
<b>DRM</b>	Disaster Risk Management
<b>NGO</b>	Non-Governmental Organisation
<b>NRSC</b>	National Road Safety Committee
<b>RSE</b>	Road Safety Education
<b>RCVIS</b>	Road Crash and Victim Information System
<b>UN</b>	United Nations
<b>UNRSC</b>	United Nations Road Safety Collaboration
<b>WHO</b>	World Health Organization

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## Road safety

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This policy paper applies the mandate and values of Handicap International to road safety activities.

It sets out the benchmarks for Handicap International's actions, choices and approaches and seeks to ensure consistent practice between the organisation's programmes while taking into account the different contexts in which they operate. It is intended as a guide for teams working in this sector of activity. It defines the themes, explains how these activities fit into the organisation's mandate, identifies the target populations and defines modalities of intervention (standard expected outcomes, standard activities) as well as monitoring and evaluation indicators.

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