Road Safety

Every year over 1.2 million people are killed and 50 million injured in road crashes worldwide. If this continues we can expect to see 250 million people killed or seriously injured over the next 20 years. Road crashes will remain the leading cause of death among the young.

It is essential that toll road planning includes practical, affordable, economic solutions that will maximize safety. It also makes sound economic sense to invest to prevent the road casualties which bleed away up to 3% of world GDP. The immediate costs of crashes are obvious – the costs of the damage itself, emergency services and hospitals and doctors. To this must also be added the cost of decades of care for those disabled for life and the loss of productive (often young) breadwinners, which often throws whole families into poverty in the developing world.

The world experience is that major reductions in road casualties can quickly be achieved by taking action on basics including providing safe basic road infrastructure so that road users know-how they are expected to act and traffic law can be enforced.

It has been known for over half a century that low-cost engineering improvements to the safety of roads can save lives quickly and affordably. The methodology, however, has not been available to inspect existing roads systematically and then target programs where they can save the most lives. Even new roads often fail to improve overall safety, particularly for pedestrians.

The World Report on Road Traffic Injury Prevention on World Health Day 2004 was issued jointly by the World Health Organization (WHO) and the World Bank and was dedicated to the improvement of global road safety. Since then the mobilization of global, regional and country efforts to address the widening road safety performance gap between poor and rich Countries has increased. However, more needs to be done to address the growing vulnerability of communities experiencing the negative impacts of rapid motorization and major road infrastructure provision.

To address this urgent priority the World Bank established the Global Road Safety Facility to generate increased funding and technical assistance for global, regional and country activities designed to accelerate and scale-up capacity building and results-focused initiatives in low- and middle-income countries. The Facility commenced operations in the first quarter of 2006 and it is now implementing a small start-up program of global, regional and country activities.

The Strategic Plan specifies the mission, goals, objectives, activities, governance arrangements, funding mechanisms and implementation priorities of the Facility. It provides the formal partnership framework for dialogue, cooperation and action concerning the ongoing management and operation of the Facility.

The Facility has been established with World Bank Development Grant Facility financing and donor contributions from the FIA Foundation for the Automobile and Society, the

Government of the Netherlands and the Swedish International Development Cooperation Agency.

Another useful and relevant report on road safety from the International Road Assessment Programme (iRAP) describes the work done to invest in practical new tools for low- and middle-income countries and then pilot their application in four countries around the globe.

World Bank Global Road Safety Facility Strategic Plan 2006 – 2015.

Vaccines for Roads, The new iRAP tools and their pilot application.
iRAP: International Road Assessment Programme. www.irap.net

Public responsability

The public authorities have broad general responsibilities as regards road safety including vehicle regulations, delivering driving licenses, taking account of safety in standards and laws relating to road safety, laws relating to maximum loads and the transport of dangerous goods, collecting and analyzing road safety data, etc. This broad responsibility cannot be delegated to a private partner as the public authorities are answerable for it to the public.

When drawing up a PPP contract, the public authorities should determine how safety is to be taken into account in the design, construction and operation of the roads. In particular, they should stipulate any special equipment required, taking account of the road characteristics (emergency telephone network, automatic incident detection, variable message signs, automatic black ice detection, etc.) as well as how this equipment should be managed and used. In particular, they should provide broad guidelines as to how roles should be shared between the operator and the police force, details of which should be set down in an agreement between these two partners.

Only the Police have the power to enforce the law by controls in the field (speed limits, safety belts, alcohol restrictions, safety distances between vehicles, dangerous overtaking, etc.) and to fine dangerous drivers. This is valid for all roads, even those entrusted to a private operator, who should facilitate this work by the Police in accordance with conditions settled by mutual agreement at the start of the contract.

If law enforcement is the sole responsibility of the Police, other road safety actions involve the road manager, alone or in collaboration with the police. As these actions concern safety, it is absolutely necessary that the respective roles of Police and road manager be clearly defined, both in the road safety manual required from the operator and in the agreement between the operator and the Police.

Finally the responsibilities incumbent upon the operator in case of accident should be defined in the contract (Module 4 -> Contracts -> 'Boiler Plate' Provisions -> Liability and indemnification). This point is extremely important.

Role of the police, role of the operator

The relationship between the Police and the road managers is necessarily close and therefore, they should examine together and in detail, right from the start of the contract, how each will perform their duties and how they will collaborate.

The tasks to be considered are as follows:

- **Checking that drivers observe the Highway Code** (speed limits, seat belts, alcohol, safety distances between vehicles, dangerous overtaking, etc.).

  These tasks are the responsibility of the Police alone, but they may be assisted by the operator for installing control equipment, parking vehicles immobilized for infringements, etc.
- **Checking behavior at the toll barrier:** Non-payment of tolls or fraud should normally be punished. Support by the Police may prove useful for enforcing punishments.
- **Checking vehicle loads:** Respecting the maximum axle loads prescribed by law is of the utmost importance if pavements are to last. Checking that the law is observed is therefore essential. According to the individual organization of each country, it may be carried out by various authorities, generally at the same time as other checks relating to transport regulations (total vehicle weight, nature of goods transported, driving hours, etc.).

  The Police are very generally called upon to support and reinforce weighing teams but they can also make checks themselves. The operator should facilitate these checks by making available suitable areas maintained for this purpose. Weight checking may also be contracted out to it. Weight checks on stationary vehicles may be accompanied by weighing in motion for which a range of measuring devices exists (based on piezoelectric sensors or wires). Setting up and managing this equipment may be obligatory for the operator as part of traffic data collection work.

  Data collection concerning accidents with bodily harm: In most countries, the Police collect basic information on accidents with physical injury and draw up the reports which will then be used for producing national accident statistics. The operator should figure on the list of recipients of accident reports to which he may add complementary information with no legal value, in order to better determine his action.
- **Alarm in case of accident:** The alarm system devices are varied: emergency telephone network, cellular telephone, operator or police patrols, automatic incident detection, etc. Sharing out the roles as regards receiving the alert depends on how the various parts of the system are managed and particularly the emergency telephones. Very generally, the Police are alerted first and are therefore responsible for alerting and dispatching the emergency services (ambulance and fire brigades) and contacting hospitals, garages, etc. along with the operator.
- **Action on the scene of an accident:** The operator and the Police are both concerned and have different tasks to accomplish. The Police are generally responsible for organizing and supervising the emergency services, regulating traffic around the scene of the accident and drawing up a report. The operator is responsible for setting up protective signing around the scene of the accident,

supervising the evacuation of damaged vehicles with the Police, assessing damage to the infrastructure facilities and equipment, conducting repair works and giving formal notice to insurance companies to reimburse the damage incurred to public property.

The following remarks should also be made:

- If the road to be operated is a motorway, it is strongly recommended to entrust policing tasks to specialist units, trained specifically for this task. Motorway working conditions are rather unusual mainly due to the amount of traffic and high speeds.
- In any case, and even if only the territorial Police patrol, the specific nature of the tasks to be performed to operate the road involve setting up an ad hoc organization, comprehensible to drivers and road manager alike. Last-minute improvisation may result in catastrophe.
- Still in the case of a motorway, the very high risk of "secondary" accidents should also be underlined. It is vital that both the emergency services arrive on the scene of the accident as quickly as possible and that measures be planned and taken instantaneously in order to warn drivers as early as possible that an accident has occurred. Progress achieved in road operation, which enabled the concept of the "intelligent road" to emerge, thus open up completely new possibilities and provide hope that further significant progress will be made in the short-term. Operators should be encouraged to take advantage of this.