C 3.1 ROAD SAFETY

Recommendations to Decision makers

There are effective and efficient measures to improve road infrastructure safety and all countries and road operators are encouraged to deploy them over their network. These include **road safety audits** (RSA) for roads during the project phases and regular **road safety inspections** (RSI) on the whole existing network as well as **accident accumulation location ("black spot") treatments**.

Road safety audits can be put into practice immediately in every country. They are very inexpensive to implement and the return on investment is significant. Countries in transition in particular should focus on RSA for their numerous projects. They may be looking for cost effective returns as well and should therefore also invest in **accident accumulation location ("black spot") treatment**.

Accident data is required to target measures to where they are most needed. Each country absolutely needs to define a national accident data collection strategy and needs to enforce it with the various partners involved (police forces etc.).

Developed countries usually have comprehensive accident data and have deployed accident accumulation location treatment measures. They would find it beneficial to complement these measures with RSA and certainly RSI.

*All road users (drivers, pedestrians, cyclists…) have their physiological and psychological limitations. Efforts should continue so that **human factors** are taken into account in road infrastructure and equipment design and operations whenever possible, at the design stage as well as during operations.*

A policy framework for road safety

- Many legal and policy issues are real impediments to full deployment of appropriate measures: Who is in charge of ordering a road safety audit? Who is responsible if an audit's remarks are not properly taken into account? How are inspectors or auditors certified? What is their liability level? Such questions need to be clearly answered in each country so that road safety practitioners can act in full confidence.
- Road planning and operation is often in conflict with other interests, road safety measures can be viewed as delaying projects, or impacting traffic volumes. How is road safety defended against these influences?
- Road safety related measures are numerous and involve emergency services, the police, road engineers, schools etc. Coordination among them is essential. Priorities among these logically vary from country to country.

All stakeholders must get involved in road safety and their actions must be prioritised and coordinated. This requires commitment at the highest local political level, so that road safety priorities can be coordinated and clearly defined.

These topics should continue to be discussed and best practices among countries shared. This can be particularly helpful for countries in transition, where having appropriate policies in place early on can foster a network of safety professionals as well as encourage the inclusion of safety in all policy decisions.

Technical aspects

Accident accumulation location ("black spot") treatment

Accident data, even if it is rudimentary, makes it possible to identify accident accumulation locations. Accident accumulation location treatment is a well known process to identify, investigate and suggest solutions for accident accumulation locations with significantly high number of accidents.

=> A PIARC guideline on accident accumulation location ("black spot") treatment would be very useful. This especially applies for countries in transition with clearly identifiable accident accumulation locations.

Network safety management (NSM)

NSM is a comparatively new comprehensive procedure on the road network in operations. It identifies corridors where accidents occur at a high frequency, and aims at understanding the specific local reasons behind this and then making cost-effective recommendations for remedies. NSM goes beyond accident accumulation location treatment and takes a wide perspective on the infrastructure and the driving procedure, so that it is able to take into account all factors affecting the drivers on a given corridor.

=> Continued knowledge exchange and a guideline on NSM would be very useful.

Recommendations to PIARC

- The road safety technical committee's founding principle is taking a systems approach that involves drivers, vehicles and roads simultaneously. Improving road safety thus requires a systematic approach which involves tackling all three subsystems. The TC addresses roadway issues, but topics outside its usual scope such as enforcement and driver's education are generally regarded also as effective ways of improving road safety overall. PIARC should clarify its position on addressing the behavioural aspects of roadway safety, and cooperate more comprehensively with other organizations that are addressing this important topic.
- PIARC produced a Road Safety Manual in 2003 and a catalogue of low cost countermeasures for road safety in 2007. Both should be regularly reviewed and updated as more knowledge becomes available. Adoption by individual countries and adaptation to local conditions should be pursued.
- Donor organizations should set the example. They should make RSA a compulsory condition for the funding of all road projects. They should also continue making funding available for road safety measures on the existing road network, such as RSI, accident accumulation location ("black spot") treatment and accident data collection.