

## **TS 4 ROAD ASSET MANAGEMENT: INTEGRATING BEST TECHNICAL AND MANAGEMENT PRACTICES WITH POLITICAL RESPONSIBILITIES”**

### **Recommendations to Decision makers**

The diversity of road system stakeholders and their often divergent demands, combined with the obligation to ensure the mobility of citizens at all times, are powerful incentives for road authorities to design asset management systems that facilitate decision-making. The aim of this way of doing things is to facilitate decision making for all stakeholders involved in this process. Such systems have, in several countries, proven to be a premium tool in forecasting the budgetary resources that are required to develop and maintain road assets.

To ensure that this implementation becomes possible and profitable, it is clear that decision makers and network managers must assume the leadership for such a move. In this spirit, road authorities must recognize the true scope of sound management in regards to the road assets and encourage this way of doing things by giving preference to this approach rather than to more empirical, established methods or management habits. Their commitment, in terms of both financial and human resources, must carry over a long period of time.

Because of their central position—between elected politicians and the population—network managers must overcome the challenge of communication on several levels. They must both foster communication within their own administration and translate technical information so that it can be understood by elected officials and the population.

### **Technical aspects**

Technical developments associated with the management of road assets and in particular with the development of management systems are progressing and must continue to progress in several respects.

In terms of data, it is clear that assets management systems must be fed with reliable data, useful for both day-to-day management and strategic decision making. This implies that technical officers must put in place the appropriate mechanisms to ensure this quality and also to increase the effectiveness of data collections. Furthermore, we must aim for the integration and structuring of the information drawn from such data so that they may be synthesized using adequate indicators and shared between the various levels of road authorities. Finally, the means of disseminating this information to network administrators, elected officials as well as to users and frontages must continue to be improved, in order to foster communications between all stakeholders in the management of road assets.

Efforts are also being made in the modelling of the evolution of the condition of infrastructures and the prediction of the needs the latter will generate. This aspect becomes all-important in the management of road assets, since the reliability of investment scenarios are largely dependent on the system's capacity to correctly model future behaviours.

In a broader sense, the technical authorities are and will continue to be called upon to quantify the benefits generated by the development of technical means, including the development of road assets management systems.

## **Recommendations to PIARC**

It is important that international organizations continue to promote the implementation of asset management systems within road authorities. Discussions between the various stakeholders and the latter's experience during this session highlighted the importance and necessity of these systems and the means used to increase their efficiency. The highlights of this session are presented below.

An effective asset management system must at the very least provide decision makers with a number of investment scenarios along with their impacts on the state, value and long-term functionality of all transportation infrastructures. The needs of road users as well as good knowledge of the environment are key elements that must be taken into account by decision makers. Economic indicators and concepts relating to engineering and safety must accordingly be integrated into the system. The resulting reports must be presentable in a way that is able to be understood by all stakeholders, be they engineers, managers or politicians, no matter their hierarchical level. The challenge with the implementation of such a system is even greater given that there is no organizational model applied to all road authorities. The more accessible and comprehensible the information, the more decision makers will be informed and inclined to support the implementation of such systems, for the greater good of society.

Within this context, simple visual tools, integrating the aggregate information relevant to the people concerned, are of the utmost importance. For example, using maps, charts and histograms, certain road authorities have established links between values of importance to decision makers based on the investments made. The economic aspects (traffic congestion), value of the assets, safety (state of infrastructures), user satisfaction (surveys of the population) and the optimization of investments (budget provenance and use) are but examples used by speakers at this session to convince and properly inform the various decision makers and other stakeholders.

These illustrated communication tools are one of the main elements of decision making and constitute a basis for discussion shared by the various stakeholders. Therefore, it is important that organizations make the most of the experience of certain road authorities in this area and continue developing the methods used to represent and aggregate the various data required in decision making.