



# IRF Manifesto

## on

# Climate Change Adaptation

It is now commonly recognized that growth, economic development and transport are inextricably linked. Just as development increases the demand for transport, the availability of transport stimulates economic development by enabling trade and economic specialization. Growth, poverty reduction, and a better quality of life cannot be realized without access to schools, hospitals, other amenities, jobs, and markets. Transport, thus, is the backbone of actions aimed at achieving the Sustainable Development Goals (SDGs), and providing sustainable transport infrastructure and services is fundamental to realize the sustainable development goals as described in the Post-2015 Development Agenda.

As climate change and the threats it poses become increasingly apparent, it is also becoming clear that the transport sector is likely to be heavily affected by the negative impacts of climate change and that measures to protect transport infrastructure and services have to be put in place. Much of this action involves adapting existing transport infrastructure to the threats posed by climate change, and building resilient new infrastructure.

The International Road Federation (IRF Geneva) and its members support global action aiming at proactively combat the potential adverse impacts of climate change on transport and make to this end the following recommendations:

- Adaptation in transport should not be viewed in isolation, nor reduced to just technical infrastructure fixes. On the contrary, adaptation should be seen as part of a wider strategic approach, reflecting the interrelationships between transport (infrastructure and network operations), the local/regional economy and land use.
- Despite our ability to forecast the impacts of climate change with a reasonable level of accuracy, our knowledge about the specific local impacts of climate change in a particular area or region remains uncertain and incomplete. Coordinated efforts to document the knowledge base on adaptation in the transport sector should be encouraged and supported;
- A degree of uncertainty will always remain in planning for adaptation. This uncertainty can, however, be taken into account by robust planning approaches and adaptive policy/decision making and should not be used as a false pretext not to plan for adaptation today.



- Given the uncertainties inherent in climate change and its impacts, it is necessary to plan and make policy based on complete, relevant, accurate, and up-to-date data. Asset inventories and asset management systems do not always contain the data required to assess resilience, or the data is difficult to access. The establishment of a national data warehouse containing data on all transport assets, land use, the regional economy, weather, and climate change data should be set as a priority in every country. This knowledge gap needs to be addressed to support the identification of climate vulnerabilities and subsequent adaptation actions.
- The creation of an open access global transport infrastructure database of adaptation oriented policies, measures and projects should be considered.
- Adaptation strategies should include both hard (engineering, technical) and soft measures. Hard measures focus on concrete action to reduce damages (eg. changing infrastructure design standards and specifications for construction materials). Soft measures for adaptation could be establishing well-prepared command and management structures, providing appropriate information systems or training personnel for managing catastrophes. Both hard and soft measures are needed and should be included in adaptation strategies.
- While we can learn from existing disaster risk management, more information is needed to develop transport systems that are resilient under changing climate conditions. Whereas retreating from areas at high risk of a climate hazard (be it sea-level rise, flooding, landslides or any other risk) may be a measure of last resort, in a planning context retreat translates into avoiding developments in high-risk areas in the first place and may result in the cheapest option.
- Wherever possible, redundancy, i.e. building some spare capacity into the system, should be considered as it can greatly reduce the vulnerability of the transport system. Allowing for alternative ways of passage, when obstruction occurs, minimizes the influence of an impact on the capacity of the transport system.
- Climate change adaptation makes evident and urgent the need for clear value management (prioritise protection and spending). The risk of the potential damage and disruption caused by future weather events needs to be weighed against the cost of the adaptation action to identify the most cost-effective solution. Road authorities may wish to identify strategic routes and assets that need to be more resilient than the rest of the network.
- Despite potential high initial costs of adaptation measures, their benefits often outweigh the costs, as several studies have found. Avoided damages include costs of damaged infrastructure, but also indirect social and economic costs due to transport service disruptions (in passenger and freight transport), injuries and casualties of residents, etc. The setting of priorities should be based on the integration of cost-benefit analysis approaches



into decision-making processes, and life-cycle costing principles should be used in developing the costs and benefits of adaptation measures.

- The development of a common assessment method (via strategies and frameworks) to procure and/or appraise/assess climate sensitive requirements should be considered. This involves the development of standard methods to evaluate restoration costs after an extreme weather event, and the costs to improve resilience in the future via preventative measures.
- Infrastructure adaptation projects ought to be considered as an integral part of multilateral climate finance schemes designed by states and international governmental organizations. The eligibility of these projects to such financial mechanisms should be enhanced.
- Infrastructure is but one aspect of the costs of adaptation. Developing the institutional capacity to plan and implement adaptation in the transport sector means creating the relative capacity in terms of personnel and equipping the personnel with the relevant skills. Personnel with a mandate and skills to deal with climate change should be resourced at all government's levels.

IRF believes that, if widely adopted and wisely applied, these recommendations will prove that viable, sustainable road transport infrastructure is not an aspirational goal but it can be translated into reality, today.

The essential precursor to significant engagement of the private sector is political commitment. By providing leadership, defining a strategy, and creating effective planning and implementation agencies, governments can create the conditions that will encourage the private sector to invest and deliver. That will greatly contribute in improving the well-being of people and communities around the world. Better Mobility, Better Life!

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#### About the International Road Federation (IRF Geneva)

Established in 1948, IRF is a membership-based organisation, representing leading corporate and institutional players drawn from the road and mobility sectors worldwide. Its mission is to promote the development of roads and road networks that enable access and sustainable mobility for all. Its approach is centred on key strategic components of knowledge transfer & information sharing, connecting people, businesses and organisations and policy & advocacy. Through its Expert Groups and Committees that address key economic, environmental and social issues, IRF is qualified and able to make a decisive global contribution to the transport sector. As a not-for-profit organisation, based in Switzerland, IRF provides a neutral and global platform for the road and mobility sectors.

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