



CEDR Transnational Road Research Programme

MoDBeaR
Mobility Management and Driver Behaviour Research

Mobility Management Guidance

February 2019



CEDR – Transnational Road
Research Programme

Mobility Management Guidance

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Ove Arup & Partners Ireland Ltd

Arup
50 Ringsend Road
Dublin 4
D04 T6X0
Ireland
www.arup.com

The ARUP logo, consisting of the word 'ARUP' in a bold, serif font.

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Glossary

Term/abbreviation	Definition/explanation
CEDR	Conference of European Directors of Roads, European platform for cooperation between National Road Authorities
CEDR member/NRA/CEDR NRA	A body or an institution representing interests of a particular country and its NRA in CEDR
CEDR member State	A respective country of a particular CEDR member/NRA/CEDR NRA
CEDR jurisdiction	A remit and domain assigned to a particular CEDR member/NRA/CEDR NRA
EPOMM	European Platform on Mobility Management
GHG	Greenhouse Gas(es)
MM	Mobility Management
MoDBear/MODBEAR	Mobility Management and Driver Behaviour Research
NRA	National Road Authority/National Road Administration
TM	Traffic Management
WP	Work Package

Executive Summary

The following document presents Mobility Management Guidance which was developed as part of the Mobility Driver Behaviour Research (MODBEAR) Project. This project was commissioned by CEDR (Conference of European Directors of Roads) and carried out by Arup, Trivector and Hasselt University.

The aim of the MODBEAR project was to analyse current Mobility Management policies and practices in place across CEDR members, National Road Authorities (NRAs) and to derive recommendations for CEDR and CEDR members for the future Mobility Management implementation.

In the context of this project, Mobility Management is referred to as a long-term focussed change of travel behaviour from car driving to more sustainable modes of transport by mainly using soft measures, such as information campaigns and coordination of activities.

This Mobility Management Guidance document presents a set of recommendations for CEDR itself and CEDR members on how to incorporate Mobility Management in their everyday role.

This Guidance takes into account that every CEDR NRA is structured and organised in an individual way, based on the varying national conditions. The provided recommendations account for these differences and provide a tailored advice depending on the extent of an NRA's involvement in Mobility Management planning and implementation.

The Mobility Management Guidance provides recommendations on a number of elements that were studied as part of the research. These elements are Mobility Management Definition and Expertise, Policies, Role, Measures, Funding and Stakeholders.

On the planning and policy-making side, NRAs are recommended to adopt a universal definition of Mobility Management with a focus on sustainable mobility and improved accessibility and merge their Traffic Management workstream into the wider Mobility Management workstream. This integration of two concepts will allow to set and achieve the Climate Change driven objectives such as reduced GHG emissions. All NRAs are also recommended to develop policies and strategies that clearly outline the role of the NRA in Mobility Management and support its Mobility Management activities.

On the implementation side, the NRAs are advised to develop a set of Mobility Management measures that can be utilised within their NRA's remit. Mobility Management implementation should be accompanied by evaluation processes based on KPIs to measure progress, effectiveness and cost-efficiency of the applied measures and tools. It is also recommended that a dedicated budget is set aside for Mobility Management by NRAs and that cross-funding options at various levels are continuously investigated.

Finally, for both planning and implementation, NRAs are recommended to regularly cooperate with all stakeholders involved in Mobility Management as this will facilitate the knowledge exchange and consistent Mobility Management policy making and implementation.

The Roadmap at the end of the Mobility Management Guidance provides a summary of all recommendations. It will help CEDR NRAs to understand their current involvement in Mobility Management and identify respective steps that need to be taken to ensure that Mobility Management becomes a more utilised tool for them.

This **Mobility Management Guidance** document is to be read in conjunction with the **Findings Report** and **Research Structure Report**.

***Research Structure Report** describes the process of the MODBEAR project implementation including methodology, assumptions, challenges and results.

***Research Findings Report** describes the findings of the MODBEAR research project and describes good practice examples.

***Mobility Management Guidance** presents the final recommendations and guidelines developed as a result of the MODBEAR research project.

Structure

This Mobility Management Guidance document provides two sets of recommendations:

Chapter 1 - Recommendations for CEDR: recommendations for successful and effective Mobility Management policy making and implementation on the CEDR level.

Chapter 2 - Recommendations for CEDR members (National Road Authorities and other organisations): recommendations for successful and effective Mobility Management policy making and implementation on the NRA/CEDR member level.

Chapter 3 – Road map and Conclusion: provides an overview over practical steps towards Mobility Management Planning and Implementation while addressing the varying existing levels of the Mobility Management implementation in the CEDR NRAs.

1 Recommendations for CEDR

As an overarching organisation, CEDR is envisioned to play an important role in establishing Mobility Management concept across CEDR NRAs and integrating it into the NRAs' planning and implementation systems. Therefore, it is recommended that CEDR promotes and supports policy making and implementation of Mobility Management in its member states.

It is highly recommended for the member states to implement Mobility Management concepts on National level, based on their needs. A uniform concept put in place will enhance the multi-national cooperation between CEDR member states.

- For example, the MAX project of 28 partners, carried out under the 6th European Framework Programme, took these first steps by trying to standardise and improve Mobility Management in the fields of quality management, campaigns, evaluation, modelling and land use planning.

A set of recommendations below advises on how this CEDR role can be enhanced.

Universal definition and consistent approach

It is recommended that CEDR adopts a universal definition of Mobility Management across all CEDR NRAs and educates its members on the fundamentals of this concept. In particular, CEDR is recommended to adopt the definition used by the European Platform on Mobility Management (EPOMM).

- EPOMM defines Mobility Management as a concept to promote sustainable transport and manage the demand for car use by changing traveller's attitudes and behaviour.

It is recommended to promote and explain within CEDR how promoting sustainable transport and influencing traveller's behaviour (Mobility Management) allows to achieve the Climate Change driven objectives, for example reduced GHG emissions.

Mobility Management as part of the wider plan

It is recommended that CEDR incorporates Mobility Management in its wider policies and strategies, for example in the CEDR Action Plan.

It is recommended that CEDR develops a dedicated Strategy Paper with a coherent set of guidelines for CEDR NRAs on how to incorporate Mobility Management into their policy making and implementation systems. This Strategy Paper needs to explain how Mobility Management proactively helps to achieve the Climate Change driven objectives.

It is recommended that CEDR develops and provides guidelines on the evaluation of the effectiveness and cost-efficiency of various Mobility Management measures to provide its members with a framework for their use.

A good starting point could be to recommend existing Mobility Management tools to CEDR members. Examples are:

- **MaxSumo** (guidance for planning, monitoring and evaluating Mobility Management measures to help break down the complex process of behavioural change into smaller steps),
- **MaxEva** (an interactive web tool for the evaluation and collection of monitoring data of Mobility Management projects), and
- The **Evidence** project (providing knowledge to help facilitate the effective integration of sustainable transport measures into urban mobility plans).
- The **Stepping Stones**¹ project (provides policy makers with tools on how to implement Mobility Management at local and regional level and provides case studies from successful policy measures implementation).

Collaboration and partnerships

CEDR is recommended to cooperate and partner with other pan-European organisations (e.g. EPOMM, THE PEP - Transport, Health and Environment, or other relevant organisations) with the purpose to establish consistent frameworks and exchange knowledge around Mobility Management on the pan-European level and to disseminate this knowledge back to the CEDR members.

Best Practice and knowledge sharing

It is recommended that CEDR creates a knowledge sharing platform and communication forum for its members to facilitate the dialogue and knowledge exchange between its members and help raising awareness of the Mobility Management concept and its importance on the NRA level.

This knowledge exchange platform would be complementary to the already existing EPOMM platform and contain information that directly relates to NRAs. It will help to establish a common terminology and language for more consistent discussions on the Mobility Management planning and implementation as well as on how it is related to Climate Change.

CEDR is recommended to create and regularly update a database of the best practice examples on Mobility Management policy making and implementation in different CEDR member states, especially in relation to NRA actions, and make this database available to its members. Alternatively, CEDR could refer to existing databases, such as ELTIS.

¹ <https://transport-era.net/results/stepping-stones/>

2 Recommendations for CEDR members

2.1 Definition and expertise

Definition

The EPOMM provides a widely accepted definition of Mobility Management which is recommended to be adopted by CEDR members and NRAs to ensure consistency across CEDR and Europe. The EPOMM leads the development of Mobility Management in Europe and provides further advice and support on how to build Mobility Management knowledge and expertise.

The EPOMM defines Mobility Management as a concept to promote sustainable transport and manage the demand for car use by changing traveller's attitudes and behaviour. CEDR NRAs are recommended to adopt the same definition or a definition that would focus on the same objectives, such as promotion of sustainable transport, effective car demand, change of travel behaviour and reduction of GHG emissions.

It is recommended that the adopted definition also focuses on such objectives as enhanced operation of the entire transport network and improved accessibility. The Climate Change focus also needs to be strongly apparent. The Climate Change objectives needs to be interfaced with concepts like resilient transport network, sustainable mobility and overall accessibility.

It is recommended that the adopted Mobility Management definition is also put in line with the wider transport and mobility concepts and objectives.

- For example, in the Netherlands, Mobility Management is defined as the organisation of smart mobility with the aim to optimally utilise the total transport system, to influence transport demand, and to facilitate and influence travel demand in order to achieve a long-term travel behaviour change.

Expertise building and knowledge exchange

NRAs are advised to seek collaboration with various stakeholders at the local, national and European level to build and merge their Mobility Management knowledge and expertise. In collaboration with these stakeholders, NRAs are advised to develop and join knowledge exchange platforms to enhance their Mobility Management expertise.

CEDR members and NRAs are recommended to establish both top-down and bottom-up knowledge dissemination processes for Mobility Management within their own organisation. As part of this, universal language and terminology need to be developed to ensure productive and straightforward dialogues between different levels of organisation.

The knowledge has to be disseminated in a language that is understandable and meaningful to everyone involved in the Mobility Management Planning and Implementation process, such as engineers, planners and decision-makers.

In relation to Climate Change mitigation and adaptation, Climate Change has to be translated into tangible consequences and challenges (e.g. network resilience in the case of flooding) and achievable goals. By doing so, Climate Change challenges can be embedded into the everyday dialogue. Climate Change term needs to be elaborated and become associated with terms like resilient transport network, sustainable mobility, improved accessibility and reduction of GHG emissions.

- The EPOMM platform and network is a good example of a dialogue and collaboration between national bodies at the European level. One of the key roles of this platform is to build, consolidate and disseminate the knowledge on Mobility Management among national governments.
- The Finnish NRA has established the national Mobility Management network that brings together about 500 professionals and experts and facilitates the exchange of knowledge between various stakeholders. The network provided newsletters, webinar, social media releases and facilitates communication and collaboration between members.
- The Portuguese NRA *Institute for Mobility and Transport* developed a national strategy, known as Mobility Package (2011). This Strategy provides national directives for mobility, a guide for the development of Mobility and Transport Plans and Guidance on accessibility, mobility and transport issues in land use planning instruments. This is an example of the NRA producing and disseminating guidance, planning aid and technical support for the application of mobility planning on a local and city level.
- It can be interesting for NRAs to collaborate with local universities. For example, in Flanders (Belgium), the government supports Mobility Management related research by establishing Support Centres, which mainly consist of university partnerships of research groups and institutions. These Support Centres focus on, among other topics, optimizing and updating policy tools for Mobility Management. This kind of information is important for NRAs in order to enhance their knowledge on Mobility Management and supports them in making policy decisions.

Mobility Management and Traffic Management

Mobility Management and Traffic Management are two distinct concepts with a broad range of planning tools and operative tools complementing each other. It is recommended that CEDR members and NRAs establish a clear distinction between the two concepts, but also understand how they are related. Enhanced understanding of both concepts and their practical applications will facilitate a better-informed decision making when planning and implementing both Mobility Management and Traffic Management measures.

Mobility Management needs to be defined as a concept aiming to promote sustainable modes of travel and reduction of GHG emissions and encourage respective changes in travel behaviour.

Traffic Management needs to be defined as a concept aiming to improve and optimise the traffic operation of the road network.

At times, Traffic Management for road construction and temporary events exploit Mobility Management measures and tools to encourage drivers to use alternative travel options. Similarly, some of the tools that originated in Traffic Management, for example traffic notifications via various media channels, can also be used for Mobility Management purposes. This interconnection between two concepts needs to be clearly defined and understood.

It is also recommended for the NRA to look more into the relevance of working with Mobility Management measures to insure the accessibility during the construction phase of infrastructure projects, and to include these considerations in their guidelines for roles, funding and stakeholder cooperation as well.

- A good practice of the above can be found in Sweden, where the Swedish Transport Administration published a handbook on planning Mobility Management measures during the construction phase. The aim is to improve accessibility for all travellers and transport modes during the construction phase of infrastructure projects. Implementing Mobility Management solutions, at the construction stage of a project, whether or not in combination with Traffic Management solutions, ensures travellers are provided with alternative mobility options.

In most CEDR jurisdictions, Mobility Management and Traffic Management are two separate concepts that are usually not integrated in practice. However, there are several advantages with uniting the objectives of Mobility Management and Traffic management into “Sustainable Mobility and Improved Accessibility”, establishing a holistic approach that integrates both concepts. This approach comprises all modes of transport and users of the transport network and facilitates sharing the same toolkit for governance, measures, funding and stakeholders to achieve the defined objectives.

- For example, in the Netherlands, Mobility Management and Traffic Management are merging into one concept called Smart Mobility (equivalent to Sustainable Mobility and Improved Accessibility) and are no longer seen as separate elements. Accessibility to places and services is at the heart of the Smart Mobility concept. This means that it does not matter whether the road user travels by car or public transport or not travel at all, but what matters is the quickest and most convenient way to reach a desired place or service. This is an innovative approach to accessibility, including accessibility by road network and Traffic Management, that combines short-term and long-term objectives.

2.2 Policies

Objectives

It is recommended that CEDR members and NRAs explicitly set and describe the Mobility Management objectives in their policy documents and strategies as well as other guidance and operational planning documents. These objectives have to be consistent between each other. They should also be in line with the existing wider objectives for transport and mobility in a respective country.

- In France, the National Strategy for Clean Mobility has been developed with the objective to shift towards more sustainable mobility choices. This strategy includes six key objectives, among which four were directly related to Mobility Management: mitigating the demand, optimizing the existing networks, carpooling and creating incentives for modal shift. NRAs have to make sure that their policies and objectives are in line with these wider national targets and ambitions.

Mobility Management objectives within one country also have to tie in with wider general strategic objectives of a country, especially in relation to Climate Change. It is recommended that NRAs include both Climate Change mitigation and adaptation goals into their Mobility Management policy documents, since sustainable and low emission mobility is an overarching objective and an important driver for the implementation of Mobility Management. Clear and quantifiable goals, e.g. in terms of greenhouse gas emission reductions, can support successful and target-oriented Mobility Management planning and implementing.

- For example, the German Sustainable Development Strategy (2016) outlines the importance of sustainable development for the Federal Government's policies. All federal institutions are called upon to contribute to the achievement of particular targets in their own fields. Among them, there are specific mobility goals.
This is an example of the NRAs having to make sure their policies and objectives are in line with the wider national targets and ambitions.
- The Swedish NRA for example integrates climate change mitigation objectives into their procurement processes and assesses reductions through all phases from constructing to operating the infrastructure. The intermediate goal is to reduce greenhouse gas emissions by 30% in the period 2015-2025. This shows that clear goals are needed for achieving actual results, and Mobility Management can be part of the solution.
- Another example is the CEDR Detector project that developed tools that help NRAs embedding climate change mitigation and adaptation into their operations and procurement processes.

A cooperation on national level between CEDR members in terms of the policies put in place and their national and cross-country effect, e.g. by mutual-impact analysis, should be taken into consideration.

It is recommended that CEDR members and NRAs use Mobility Management as a planning concept aiming to reduce dependency on passenger cars, manage overall transport demand, not only road traffic, and improve the overall accessibility on all national transport networks, not only on the national road network. Some of these tasks should be done in close consultation and cooperation with the respective organisation (e.g. due to functional and funding roles segregation).

- A good practice can be found in the Netherlands. They run a dedicated Optimising Use programme that encourages collaboration between various stakeholders. The programme encourages the state, regional authorities and private sectors to work together. The Dutch NRA has mainly a strategic role in this programme.

It is recommended that CEDR members and NRAs identify situations in which Mobility Management measures are the most favourable solution to resolve a transport-related problem, like in the case of the Four-Step principle, developed by the Swedish NRA. The four steps refer to (1) measures that effect a change of travel patterns, (2) measures that optimise the use of the existing road network, (3) minor road improvements and (4) major road improvements. Costs should, if this is possible, be provided from the same budget, no matter which "step" it is. This approach allows to distinguish between various situations and pick the most suitable and cost-efficient measures to address a particular problem.

Roles and responsibilities

It is often the case that several national authorities within a state are involved in Mobility Management policy making and implementation or only some parts of both processes. It is recommended that the NRA's policies, and documents clearly define roles and responsibilities of all parties involved, including the NRA's itself, and identifies and governs any possible overlaps and gaps between the mandates of different bodies.

- In Ireland, the National Transport Authority provides a set of guidance documents for local authorities and companies to support the implementation of Workplace Travel Plans which is the key element of their Smarter Travel concept. The presence of these formal guidelines sets the direction to follow for local authorities and private companies. Due to these guidance documents, it is clear to all parties what their role is in the implementation and planning of Mobility Management measures is.
- Another example can be found in Finland, where the Finnish Transport Agency coordinates Mobility Management on a national level, and this as part of the Climate Policy Programme for 2009-2020. In addition, the FTA published a report in 2016 examining its own role in supporting the national strategy and in supporting the State's sustainable development goals.

Measures and tools

It is advised that the NRA policies clearly set and describe the process for the selection and application of Mobility Management measures and tools for various scenarios, for example as normal road operations, planned events such as construction works, and unplanned events such accidents, extreme weather, etc.

It is advised that the NRA policies clearly set and describe the evaluation process for both effectiveness and cost-efficiency of Mobility Management measures and tools and provides a set of Key Performance Indicators (KPIs) to be used for the evaluation process.

- A useful tool for planning, monitoring and evaluating Mobility Management measures is MaxSumo, developed in the MAX-project. The aim of MaxSumo is to break down the complex process of behavioural change into smaller steps that can be monitored with ongoing implementation, and possible deviations can be corrected at early stages. It is a standardised and systematic method which also makes it possible to compare progress between projects.

Funding

It is recommended that the NRA policies clearly define and describe the funding processes and mechanisms that have to and can be used for the implementation of Mobility Management measures. This also means to clarify the conditions under which Mobility Management measures can be funded by the NRA. Appropriate best practice examples can be found in Chapter 2.5.

2.3 Role in Mobility Management

Clear responsibility and involvement

A clear definition of the role of the NRAs in Mobility Management is needed.

It is recommended that the role and involvement of the NRA in Mobility Management is clearly defined and documented.

- For example, the Finnish NRA has been organising Mobility Management since 2010, providing national coordination and expert services through the state-owned company Motiva Ltd.

The NRA role needs to be coordinated and aligned with the wider Mobility Management policy within the country.

The NRA role needs to be transparent and well communicated within the NRA itself, but also within other parties involved in Mobility Management policy making and implementation as well as wider Transport Planning.

It is recommended that the NRA is engaged in both the policy making and implementation process of Mobility Management. This ensures better consistency and transparency between NRA's objectives and their implementation.

- A good practice example of this can be found in Norway. The Norwegian NRA is often involved in the implementation of Mobility Management measures in cooperation with public transport administrations and operators with the objectives of achieving a more sustainable transport system, managing long-term events affecting the transport network capacity, and for piloting new mobility services.

However, not all NRAs have the mandate to carry out Mobility Management on their network, as some NRAs only manage the national motorway network which gives them less opportunities to implement Mobility Management. It is therefore recommended that NRAs gain clarity if and how they can use Mobility Management based on their mandate.

If the NRA does not carry out Mobility Management tasks themselves, then a close cooperation with the responsible Mobility Management body/bodies is recommended.

Cooperation and coordination with other institutions and bodies

It is recommended that the NRA has a clear understanding of the role of other parties involved in Mobility Management policy making and implementation and what their respective responsibilities are. The NRAs need to establish contact and cooperation with other parties involved in Mobility Management to ensure its plans are aligned with the wider Mobility Management objectives and understand where synergies can be achieved.

- In the Netherlands, the Optimising Use Programme encourages the collaboration between various stakeholders. The Dutch NRA is one of the partners of the programme and has a strategic role.
- In Austria, the Klimaaktiv mobil initiative by the Federal Ministry of Sustainability and Tourism is taking national responsibility for Mobility Management and partner with other national level organisations such as the Ministry of Transport, Innovation and Technology (NRA). Action plans under this initiative are elaborated with ministries, as well as the Federal States, the cities, the business sector, and academia with participation of the NRA.

Collaboration with authorities and organisations on various levels is favourable.

It is also recommended to cooperate across CEDR members, on what policies should be implemented with which effect, and in order to determine the mutual impact between all entities involved on national and cross-border levels.

- For example, Hungary is working on a Memorandum of Understanding with the neighbouring countries in the field of Cross-Border Traffic Management. Such memorandums could also be developed for Mobility Management purposes and could represent a first step towards NRA cross-border collaboration.

Clustering of functions

It is favourable that the NRA keeps its primary functions under one organizational structure, in particular such functions as policy making, strategic planning and the actual operation of the road network and implementation of various measures. Separating these functions could result in inconsistent approach to the operation of the road network and implementation of associated projects and measures including Mobility Management measures.

2.4 Measures

As per EPOMM, at the core of Mobility Management are “soft” measures like information and communication, organising services and coordinating activities of different partners. Soft measures most often enhance the effectiveness of “hard” measures within urban transport (e.g., new tram lines, new bus roads and new bike lanes). Mobility Management measures (in comparison to hard measures) do not necessarily require large financial investments and may have a high benefit-cost ratio.

Mobility Management measures often have larger impact when combined with infrastructure measures and policy measures. According to a study² that compiled a number of evaluated green travel plans at work places all over Europe, the following effects in terms of reduction of private motorised transport use were found:

- Information and campaigns to increase sustainable travelling: - 5 %;
- Information combined with better infrastructure for walking, cycling or public transport: - 10-15 %;
- Information and better infrastructure for walking, cycling or public transport combined with parking regulations: - 25-30 %.

The largest reduction of car trips could be found in travel plans that included parking management, car sharing and reduced public transport fee. It is likely that these effect relations apply also in other contexts, such as on a national level.

Knowledge building

It is recommended for all NRAs to build their knowledge on the Mobility Management measures and their effects as well as on the tools that help choosing the most appropriate Mobility Management measures and methods for different scenarios and situations.

It is therefore important to use and develop further upon the existing European networks, such as EPOMM – European Platform on Mobility Management, and their respective national level equivalents, such as BEPOMM in Belgium. These platforms can be used to exchange experience and to inform on various Mobility Management measures.

Implementation

It is recommended that the NRAs develop a set of Mobility Management measures for normal road conditions, planned and unplanned events, and define the responsibilities and roles of different stakeholders involved.

² Trivector PM 2015:03 Effektunderlag för grön resplan

The NRAs are advised to communicate and disseminate the knowledge of the established implementation procedures and responsibilities within their own organisations and to stakeholders they work with.

- Again, EPOMM and their national equivalents represent a good practice example of this. The presence of a dedicated networking and promoting platform helps to promote Mobility Management and establish a firm dialogue between all stakeholders.

Evaluation

It is recommended that the NRAs develop and put in place evaluation mechanisms and processes to measure the effectiveness and overall success of the used Mobility Management measures. The NRAs are recommended to develop a set of Key Performance Indicators (KPIs) to ensure consistency of the evaluation process and cross-comparison of various measures used. The NRAs could adopt evaluation methods, such as provided by MaxEva, and indicators used for Traffic Management measures.

It is recommended that the NRAs develop and put in place evaluation mechanisms and processes to measure cost-efficiency of the used Mobility Management measures. The NRAs are recommended to develop a set of evaluation metrics to ensure consistency of the evaluation and cross-comparison of various measures used. The NRAs could adopt the national standard models for cost-benefit analysis.

- For example, the Dutch NRA specified that they use a dedicated evaluation indicator known as “peak-hour avoidance”. Every time one person does not travel by car, one peak-hour avoidance is achieved. During road works, the number of peak-hour avoidances required to keep congestion down to acceptable levels is calculated. This makes comparison of effectiveness of different measures possible.

Understanding effectiveness and cost-efficiency of the measures used is essential for a better-informed decision making in Mobility Management planning and implementation.

Best practice

It is recommended that NRAs develop Good Practice documents on Mobility Management planning and implementation and share them within their organisations as well as with other stakeholders involved in Mobility Management.

- In Finland, the Mobility Management expert network shares knowledge around various topics related to Mobility Management but also provides best practice examples in order to disseminate applicable knowledge, demonstrate successful measures, and ultimately foster implementation of similar Mobility Management measures.

2.5 Funding

Funding structure

The NRAs are recommended to define a framework for Mobility Management funding, guided by their objectives and roles assigned. It is favourable to assign a dedicated budget for Mobility Management projects, distinct from the funding for Traffic Management.

- Sweden is currently setting a good example in this, by going through an internal process aiming to identify what measures can be financed by the NRA and under what circumstances. Generally, provision of physical measures supporting the travel behaviour change and associated information campaigns can be funded by the Swedish NRA. However, improvements of other travel mode services as well as dedicated behaviour change measures have to be funded by other stakeholders.

In some CEDR members, the NRAs provide financial support (up to 50% of cost) for investments in cycling and public transport infrastructure which is not owned by the NRA but by the municipality or regional authority for public transport. This is the case in the Swedish and Norwegian Urban Environment Agreements. Mobility Management can in these cases be a service in return from the municipality.

- In Finland, the Finnish NRA has a leading role in Mobility Management funding. Since 2012, the national government subsidies have been used to promote Mobility Management work on a local level (€900.000 per year). The support involves funding projects for cities, municipalities, regional bodies and non-profit organisations, specifying that the subsidies must be used for marketing, information and service development that promote favourable modal choices.

In cases where NRAs are not allowed to fund Mobility Management activities, alternative public or private initiatives (e.g. sponsorships or grants) should be explored at local, regional, national and international levels.

- In Germany, the Federal Government supports the federal states and local authorities on their public transport projects with dedicated regional funds and thus makes a considerable contribution to the environmentally friendly mobility. The funding programme is regulated via special financial acts, the Disentanglement Act and the Community Transportation Financing Act.
- Another good practice example can be found in Bristol, Great Britain. An Urban Consolidation Centre was designed to serve a major retail area of 350 commercial establishments. It was initially realized within the CIVITAS European Program framework (Vivaldi project). Third party logistics companies were invited by the Bristol City Council to bid to operate the city centre. This case is a good example of a public private partnership and an interesting case showing how private parties can support financially with transport- and mobility-related objectives.

Evaluation

It is recommended that the NRAs, apart from evaluating impact and effectiveness of Mobility Management measures, develop and put in place an evaluation process to measure the cost-efficiency of the used Mobility Management measures. The NRAs are recommended to develop a set of evaluation metrics and Key Performance Indicators (KPIs) to ensure consistency of the evaluation and cross-comparison of various measures used. This will help to adjust and plan funding for the future projects.

A useful tool for monitoring and evaluating Mobility Management measures is MaxEva by EPOMM which also makes cross-country comparison of implemented measures possible.

Cooperation

It is recommended that the NRAs cooperate with different Mobility Management sponsors and other bodies that work on Mobility Management implementation within their country in order to identify opportunities to co-fund Mobility Management measures. In particular, cooperation with regional and local authorities is recommended as it can lead to a more efficient and beneficial use of financial resources.

- In the Netherlands, the Optimising Use programme is co-funded on the one side by the State, by the regional governments and the business sector on the other side (50-50%). This provides a platform for joint funds to be accumulated and used for necessary mobility-related projects in each region.

2.6 Stakeholders

European level

It is recommended that CEDR members and NRAs aim to establish cooperation and coordination with their peer organisations in other countries across CEDR jurisdiction and across wider Europe for knowledge exchange and consistent Mobility Management policy making and implementation.

It is recommended that CEDR members and NRAs aim to establish cooperation and coordination with wider European organisations involved in Mobility Management policy making and implementation, for example, with the European Platform on Mobility Management (EPOMM). This effort can be coordinated via CEDR itself.

National level

It is recommended that CEDR members and NRAs engage and collaborate with national organisations and institutions that are involved in the transport and mobility sector and particularly with those that lead Mobility Management policy making and implementation to ensure consistent and coherent Mobility Management framework across a State.

It is recommended that CEDR members and NRAs engage and collaborate with national organisations and institutions from other industries and sectors (for example, health, energy and environment sectors) to establish a consistent and coherent approach to Mobility Management policy making and implementations across different industries.

- In Austria, the Federal Ministry of Sustainability and Tourism is in charge of Mobility Management. It leads the National climate protection initiative in transport, Klimaaktiv mobil, and is cooperating with the Ministry of Transport, Innovation and Technology in its efforts to reduce greenhouse gas emissions associated with the transport sector. This is a good example of how the national level institutions from different sectors cooperate to reach one common goal.

Regional and local level

CEDR members and NRAs are recommended to establish cooperation and coordination with local and regional authorities to ensure geographical consistency in policy making as well planning and implementation of Mobility Management measures.

Mobility Management is an important element of Sustainable Urban Mobility Plans (SUMP). The EPOMM includes SUMP projects and information and references reports with guidelines on developing and implementing SUMPs. If NRAs provide guidance for the inclusion of SUMP, an important link between national level objectives and local/regional implementation can be established.

- An example of this can be found in Belgium's Brussels Capital Region. In 2013, a new Regional Mobility Plan was given regulatory status with the objective to achieve consistency between regional and municipal mobility strategies and projects. Currently, the IRIS 2 Mobility Plan Brussels Capital Region (2015-2020) is being implemented with measures promoting active modes and giving priority to public transport. A third-generation mobility plan is being developed focusing on freight transport.

CEDR members and NRAs are recommended to establish cooperation and coordination with local and regional stakeholders that are involved in Mobility Management planning and implementation on a daily basis, such as transport operators and providers, constructions companies and contractors, traffic management companies, software and technology developers, equipment manufacturers, consultants and advisors, media representatives, research or educational institutions.

Good cooperation with these stakeholders can facilitate the development of intermodal services and solutions which are key to effective Mobility Management.

3 Roadmap and Conclusion

The graph below provides an overview over the steps that need to be taken to introduce and strengthen the Mobility Management practice within an NRA. Based on different levels of maturity and integration and how proficient NRAs are in the use of Mobility Management, the focus of the work with Mobility Management should be adjusted and customised.

The steps in the Roadmap cover all Mobility Management dimensions of this Guidance document: Definitions and Expertise, Policies, Role in Mobility Management, Measures, Funding and Stakeholders.

This Roadmap can provide a starting point for NRAs of different structures and set-ups that would like to implement Mobility Management or improve their Mobility Management practice.

This Mobility Management Guidance provides an initial Guidance to NRAs about their Mobility Management practice. It needs to be backed up by guidance tailored to individual NRAs and special tools that respond to the varying needs in different CEDR members.

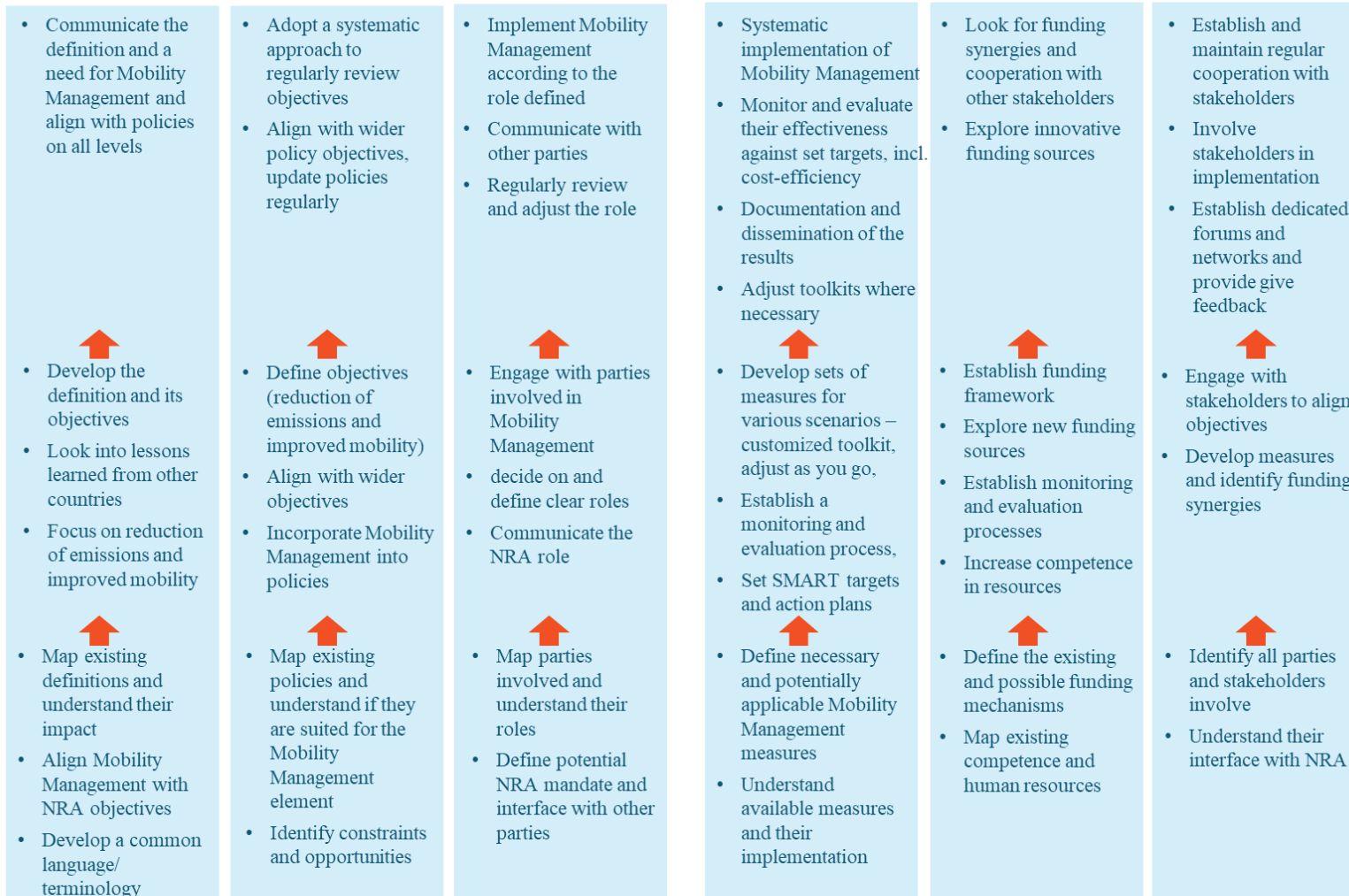
Mobility Management in your CEDR NRA is ...

Focus of the Activities in Mobility Management

... Featured in current policies and practices, and systematically used for wider Mobility Management purposes

... Featured to some extent in current policies, but ad hoc use, mainly for Traffic Management purposes

... Not featured in current policies and practices, not commonly used



Definition, Expertise Building, Communication **Policies** **Role in Mobility Management**

Mobility Management Planning and Policy Making

Measures **Funding and Resources** **Stakeholders**

Mobility Management Practice and Implementation

Systematic Implementation, Communication and Innovative Approach

Create Conditions for Successful Mobility Management Planning and Implementation

Mapping the Current Baseline of Mobility Management