

Appropriate national policy frameworks for sustainable urban mobility plans

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Abstract

Objective This paper develops recommendations which would enable national governments to support individual cities in their development of Sustainable Urban Mobility Plans. It draws on the work of an Advisory Group of the European Commission.

Methods National governments have the power to set the context in which cities develop their urban transport plans. However national governments often fail to provide the support needed by cities and differ widely in their approaches. An Advisory Group to the European Commission has looked specifically at the evidence, developed recommendations which the Commission might offer to national governments, and considered how national governments can be encouraged to adopt them. We consider the evidence on the barriers which

result from inadequate policy support, propose a draft set of recommendations, test them against current practice in six European countries, and draw conclusions.

Results Most of the data used in the paper draws on the earlier work of the ECMT and the EC. The paper summarises the analysis of this information by the Advisory Group and presents the resulting nine recommendations and 20 criteria. It assesses the current situation in the six countries against these 20 criteria, discusses the differences between countries, and highlights the ten criteria on which performance generally is weakest. It concludes by suggesting ways in which the Commission might focus its advice to national governments, and in which national governments might learn from one another.

Keywords Urban transport · Policy framework · Governance · European cities

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1 Introduction

The European Commission's attitude to urban transport has changed dramatically in the last decade. Ten years ago, its approach was still influenced by the principle of "subsidiarity": avoiding becoming involved in policies which could reasonably be pursued at national, regional or local level. However, its analysis (EC [1, 2]) demonstrated that urban transport was responsible for 80% of congestion costs, 23% of all carbon emissions from transport and 38% of all road fatalities. Moreover, urban areas accounted for 70% of Europe's population, but over 80% of its economic output (EPRS [3]). On all these grounds, it was argued, urban transport was too important to be left solely to local government to manage.

The Commission's Action Plan on Urban Mobility (EC [4]) recommended encouraging the adoption of Sustainable

Urban Mobility Plans (SUMP). A SUMP is “a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles” [5]. The 2011 White Paper (EC [6]) proposed that there might be a mandatory requirement for SUMP for cities over a certain population, and that the allocation of regional and cohesion funds might be made conditional on the submission and auditing of a SUMP. A subsequent project, ELTISplus, has provided guidance on the development of SUMP [5].

These recommendations and guidance presuppose that the development of SUMP will be beneficial. The guidance itself [5] outlines the differences between a conventional approach and that advocated in the guidance, implying that, by being more objective-led and inclusive it should be more effective. It is inevitably difficult to test this hypothesis, given the lack of a counter-factual in cities which have introduced SUMP. A report from the European Joint Research Centre [7] appears from its title to have quantified the effect of developing SUMP, but in practice focuses on the potential benefits of implementing a wider range of policy measures. Perhaps the most convincing evidence comes from analysis for the UK Department for Transport of the benefits experienced by English local authorities following the completion of the first five year period of Local Transport Plans [8]. Local Transport Plans (LTP), introduced in 2000, were a precursor to SUMP and based on similar principles, but with the exception that they covered the whole of a local authority’s area rather than just cities. Atkins found that the LTP process had introduced a step change in the level of consultation and partnership working, that local authorities were using long term funding more effectively, and that there had been a focus on wider policy goals and on support for sustainable transport modes.

While it is the Commission which has been leading the development of guidance on SUMP, and encouraging cities to exchange experience through programmes such as CIVITAS (www.civitas.eu), it is national governments which set the context within which cities develop their SUMP. As will be seen in the next section, there is considerable diversity of approach among the 28 national governments in the European Union, and several weaknesses in many governments’ approaches. The European Commission is understandably reluctant to dictate to national governments how they might overcome these weaknesses. Moreover, the solutions appropriate to one national decision-making structure may well not be suitable in another system of governance. With this in mind, the Commission established an Advisory Group to suggest ways in which advice on national policy on SUMP might be developed, and how that advice might assist national governments in learning from one another. Membership of the

Advisory Group was selected by the Commission from a longer list of experts who had extensive experience in the development of the SUMP concept and its application in their own countries, and included the six authors of this paper.

In this paper we focus on the role of national governments in facilitating the development of SUMP by cities, and report on the analysis conducted by the Advisory Group. In the next section we summarise the evidence. We follow this with a suggested set of recommendations for national policy on SUMP. We then assess the extent to which six European countries currently follow these recommendations. We conclude with an assessment of the appropriateness of our suggested recommendations, and proposals for how they might be adopted and how countries might be encouraged to learn from one another.

2 The problem

National governments have the power to set the context in which cities develop SUMP or, more generally, plan urban transport. In particular, they provide the legislation within which urban transport is developed and the regulatory framework within which it operates; they determine the decision making framework within which cities formulate and implement transport plans; they allocate a significant portion of the finance for urban transport, specify how it may be used, and determine the other ways in which cities can seek funding; they are in a position to collect much of the data on which SUMP are planned and to commission research on which SUMP are based; and they are able to provide guidance and training for those involved in SUMP planning and implementation.

In practice, the 28 national governments differ considerably in the way in which they carry out these functions, and in some cases completely fail to do so. A State of the Art Report produced in 2012 during the preparation of SUMP guidance reviewed the then current state of development of SUMP in the 27 countries of the EU. It assessed each country in terms of whether the requirement for a SUMP was legally defined, whether national guidance was provided, whether plans were already in place; whether they were required to reflect a sustainability objective; whether full public involvement was required; whether there was political support for SUMP; and whether cities had the technical capability.

The results are shown in Tables 1, 2 and 3 [9]. Even the seven most advanced countries did not all focus on sustainability, provide political support or encourage public involvement. Among the ten least advanced countries, six had at most a limited awareness of the SUMP concept. As May [10] notes, changes in government within a given country can also lead to very different approaches to the support of cities’ SUMP over

Table 1 Countries with well established SUMP planning frameworks [9]

| Country: | Legally defined | National guidance | Plans in Place | Sustainability objective? | Full Public involvement? | Linked with finance | Political support? |
|--------------------|-----------------|-------------------|----------------|---------------------------|--------------------------|---------------------|--------------------|
| Belgium (Flanders) | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| France | Yes | Yes | Yes | Yes | ? | Yes | ? |
| Germany | No | Under discussion | Yes | No | ? | Yes | No |
| Italy | Yes | Yes | Some | ? | ? | No | ? |
| Netherlands | Yes | Yes | Yes | Most | Yes | Yes | Yes |
| Norway | Yes | Yes | Yes | ? | No | Yes | Yes |
| UK (*) | Yes | Yes | Yes | ? | Yes | Yes | ? |

(*)Relates to England and Wales, the Scottish system is more akin to those in Table 2 and Northern Ireland to those in Table 3

time. He charts a trend from over-prescription, to supportive guidance, to a *laissez faire* approach within a decade.

A parallel exercise for the Commission reviewed in greater detail the current situation on SUMP in England, France, Germany and Poland. It added a number of elements to the assessment in Tables 1, 2 and 3:

- whether SUMP were developed in the context of national objectives and targets
- whether government funding was made conditional on the SUMP and whether financial support was given for SUMP preparation
- what the time frame for a SUMP was
- whether the SUMP was coordinated with other policies and plans
- what the requirements were for adoption, certification and auditing
- what monitoring, evaluation and progress reporting was required
- what guidance and support was available.

As an aid to monitoring the situation in the now 28 member states, the Commission has now established a summary reporting framework on its ELTIS platform (www.eltis.org/mobility-plans/member-state-profiles). To date profiles are available for 18 countries, with links to statutory documents where appropriate.

Prior to these European Commission initiatives, the then European Conference of Ministers of Transport had conducted an international study of 168 cities in four continents (ECMT [11]). That review concluded that cities were generally aware of what was needed to achieve a sustainable urban transport strategy, but that implementation was “easier said than done” (ECMT [11]). The report highlighted the principal barriers to effective SUMP development as poor policy integration and coordination at a national government level, counterproductive institutional roles as between the tiers of government, unsupportive legislative and regulatory frameworks, weaknesses in financing and pricing, poor data quality and quantity, limited public

Table 2 Countries which are moving towards an approach to sustainable urban mobility planning [9]

| Country: | National Guidance | Plans in place | Linked with finance | Political support | Technical capability |
|--------------------|-------------------|----------------|---------------------|-------------------------------|----------------------|
| Austria | No | Some | No | Locally yes | Locally yes |
| Belgium (Wallonia) | Yes | Some | Some link | ? | ? |
| Denmark | No | Yes | No | Partly | Yes |
| Estonia | No | Some | No | No | No |
| Finland | No | Some | Yes | No | ? |
| Hungary | No | Yes | No | No | ? |
| Poland | No | Some | No | Limited | Yes |
| Portugal | Yes | Some | Informally | Limited | Limited |
| Spain (*) | Yes | Some | ? | In some cities at local level | Yes |
| Slovenia | Under development | One | No | ? | Limited |
| Sweden | Yes | Some | No | Locally | Yes |

(*)The analysis here relates to Spain as a whole – some Autonomous Regions such as Catalonia have also developed their own guidance (and cities have developed SUMP) which would place them in the group in Table 1

Table 3 Countries which have yet to adopt sustainable urban mobility planning [9]

| Country | Knowledge of SUMP concept | Technical capability | Political support |
|----------------|---------------------------|----------------------|-------------------|
| Bulgaria | No | No | Limited |
| Croatia | Yes | ? | Yes |
| Czech Republic | ? | No | No |
| Greece | Yes | No | Limited |
| Ireland | No | No | Yes |
| Latvia | No | No | ? |
| Lithuania | Limited | No | No |
| Malta | Limited | Limited | Very limited |
| Romania | Yes | Yes | Very limited |
| Slovakia | No | Yes | ? |

support and lack of political resolve. A follow-up to that study confirmed its findings and identified a further barrier of weaknesses in the process of policy formulation (ECMT [12, 13]).

In an assessment of the requirements at a national level for encouraging good practice in SUMP development, May [14] reviewed the work of the EC and ECMT and national studies in the UK [8, 15] and Scandinavia [16], and concluded that they were remarkably consistent in their assessments of the barriers to effective SUMP development. He identified the principal ones as:

1. conflicting institutional roles, both vertically and horizontally;
2. hesitant political commitment to the principles of sustainability and to the solutions needed;
3. poor integration between the policy sectors, and particularly between transport and land use;
4. inappropriate financing, both for plan preparation and for implementation;
5. limited skills in option generation and undue emphasis on supply-side solutions;
6. limited public support and lack of experience in stakeholder involvement; and
7. poor data and lack of evidence of the performance of specific solutions.

National governments, which typically have overall responsibility for all of these, are thus often the weak link in the relationship between the European Union, which is concerned to enhance the quality of urban transport, and individual cities, which have the direct responsibility for designing and implementing SUMPs. Based on the review above, we concluded that many national governments exhibited one or more of the

following barriers to effective oversight of urban transport policy:

- a. lack of a national policy on urban transport and specifically a requirement for SUMPs;
- b. lack of continuity or consistency in that policy;
- c. lack of clarity and coordination in the responsibilities of different government departments;
- d. failure effectively to devolve responsibility for local transport, and its coordination with other policy sectors, to cities;
- e. failure to articulate national policy objectives and targets within which SUMPs can be developed;
- f. failure to encourage public and stakeholder involvement in the development of SUMPs;
- g. failure to provide the legislation and regulation necessary to facilitate effective local decision-making;
- h. lack of political support for those making decisions at a local level;
- i. lack of adequate, unfettered funding for the development and implementation of SUMPs, or the delegated powers to raise such funding locally;
- j. lack of guidance, research, data support and skill development to facilitate such delegation;
- k. inadequate monitoring and auditing of the performance of cities or, at the opposite extreme, over-prescription and a lack of trust.

3 The basis for advice on national policy on SUMPs

The remit of the Advisory Group was to suggest to the European Commission the basis on which advice might be offered to national governments to enable them to provide effective support for SUMPs. In doing so, we drew heavily on earlier recommendations formulated by the then European Conference of Ministers of Transport (ECMT).

In its 2002 and 2006 reports, the ECMT set out a number of recommendations to national governments, who were seen as crucial in enabling and supporting local government initiatives. Briefly, these were that national governments should:

1. establish a national policy framework for urban travel which supports and influences policy on land use, health and the environment;
2. improve institutional coordination and cooperation, horizontally between policies and vertically between tiers of government;
3. decentralise responsibilities where possible and centralise them where necessary;

4. support local or regional authorities in the development, appraisal, monitoring and evaluation of integrated, sustainable, urban travel strategies;
5. encourage effective public participation, partnerships and communication;
6. provide a supportive legal and regulatory framework, particularly for public transport, demand management, emissions and safety;
7. ensure a comprehensive pricing and fiscal structure which sends appropriate signals to users and operators;
8. rationalise financing and investment streams so that they are consistent across all modes;
9. improve data collection, monitoring and research, particularly by carrying out consistent monitoring of the implementation of urban transport policies (ECMT [11, 12]).

These nine recommendations broadly reflect the barriers (a-k) listed above. The only three barriers which are not fully reflected are lack of continuity or consistency in the policy on urban transport (b), lack of political support for those making decisions at a local level (h), and inadequate monitoring and auditing of the performance of cities or, at the opposite extreme, over-prescription and a lack of trust (k).

We concluded, based on our literature review, that the ECMT's recommendations could be expanded to provide a suggested set of recommendations for national policy on SUMP's by adding the text in italics below:

1. establish a national policy framework for urban travel which supports and influences policy on land use, health and the environment *and maintain consistency in that policy framework over time*;
2. improve institutional coordination and cooperation, horizontally between *national* policies and vertically between tiers of government;
3. decentralise responsibilities where possible and centralise them where necessary *while maintaining an auditing role over cities' performance*;
4. support local or regional authorities in the development, appraisal, monitoring and evaluation of integrated, sustainable, urban travel strategies *and encourage the development of the technical skills required*;
5. encourage effective public participation, partnerships and communication *and provide effective political support for the policies adopted*;
6. provide a supportive legal and regulatory framework, particularly for public transport, demand management, emissions and safety;
7. ensure a comprehensive pricing and fiscal structure which sends appropriate signals to users and operators;
8. rationalise financing and investment streams so that they are consistent across all modes;

9. improve data collection, monitoring and research, particularly by carrying out consistent monitoring of the implementation of urban transport policies.

Our intention was to suggest, against each of these recommendations, advice which the Commission might offer to national governments. Before doing so, we judged that it would be informative to assess the extent to which these recommendations were currently being followed in the six countries with which we were most familiar. This review was designed, in particular, to assess whether this initial list of recommendations needed further expansion, and whether there were some elements of these recommendations which were proving more problematic than others.

Each author used a standard framework based on these recommendations to assess the situation in his or her own country based on current policy documents and the author's detailed understanding of policy and practice.

4 The current situation in six EU countries

4.1 England

National policy In this section we review the situation in England outside London. Transport is a devolved responsibility, and other parts of the UK, including London, operate under different procedures. Over a 35 year period from 1974, the national government established a policy framework in which all local authorities were required to produce first Transport Policies and Programmes (TPPs) and subsequently Local Transport Plans (LTPs). Local Transport Plans were a significant development of the TPP approach, intended to provide a more rigorous regime for local transport planning and introducing a longer term (5 years) and more strategic approach to local transport planning and delivery, with a strong emphasis on sustainability. May [10] charts the development of these over time, and notes that the guidance on the third round of Local Transport Plans in 2009 (DfT [17]) was the least prescriptive and gave Local Transport Authorities greater freedom to produce genuinely 'local' transport plans that reflected local needs and aspirations. At the same time it was the most comprehensive in its consideration of the interactions with land use, health, education, social services and the environment, for all of which local area agreements were encouraged. While the new government in 2010 elected not to require further LTPs, there remains a statutory requirement on local authorities to produce and keep under review a LTP, and the government has confirmed that LTP3 guidance remains the current guidance. In practice several cities have elected to update their own Plans. The frequent changes in policy on LTPs make it difficult to maintain consistency in the approach adopted.

Institutions There is no national transport plan, and transport policy is influenced by five government departments, with little collaboration between them, and with the Treasury becoming increasingly dominant. There is no elected regional government in England, but until 2010 regional bodies were responsible for producing a Regional Spatial Strategy, and Local Transport Plans were expected to be consistent with that strategy. These arrangements were dismantled in 2010, but were replaced by Local Economic Partnerships (LEPs) and, in the conurbations, City Regions and, latterly, Combined Authorities which provide for some coordination between individual local authorities [18]. LEPs develop a Strategic Economic Plan, but some aspects of regional spatial planning, such as housing, are now less well coordinated. Bus and rail services are provided by the private sector, with limited opportunities for cities to influence service provision [19], though the government has recently offered Greater Manchester the opportunity to franchise bus services following the model adopted in London [18].

Decentralisation Decentralisation and devolution attracted greater emphasis under the last government, and there is now increasing diversity of treatment among English cities. Cities are responsible for roads, traffic and parking, and for planning decisions which influence transport demand. Bus services are provided by the private sector, under the government's competition laws, with cities able to seek tenders for unprofitable services. Rail services are operated by the private sector under franchises awarded by central government. Under the LTP system, the government specified performance indicators and targets and monitored performance against them. In the early stages local authorities were penalised financially for not meeting their targets. These monitoring requirements have now been withdrawn.

Support for SUMPs Under the LTP system, government provided detailed guidance to cities on the preparation of LTPs. As May [14] notes, the nature of that guidance changed over time. The LTP1 and LTP2 guidance specified in detail the objectives to be met and the way in which policy measures were to be justified. The LTP3 guidance gave cities much more freedom in objectives, timescales and policy measures, and provided support advice on problem identification, option generation and appraisal. It could be argued that this gradual transition from prescription to guidance was an appropriate approach in developing a local capability to plan effectively. In parallel the government supported the development of the Transport Planning Skills Initiative [20] and the Local Transport Planning Network as ways of enhancing the local government skills base. Such support was withdrawn from 2010 and subsequent cuts in local government funding have led to a substantial reduction in the skill base.

Participation and political support Throughout the TPP and LTP systems, there has been strong support for public involvement and stakeholder engagement in transport policy, with the LTP3 guidance including a section on good practice (DfT [17]). There are also statutory requirements for consultation on many aspects of policy. To a large extent that encouragement has been sustained through the growing emphasis on localism and Local Economic Partnerships. Central government political support for controversial local decisions has been less apparent. This was perhaps most apparent under the Labour government, which legislated to enable cities to introduce road pricing, and initially supported the development of some 30 proposals, but left cities to face the task of attracting public support; as a result only one of the schemes outside London was implemented [21].

Laws and regulations There is comprehensive legislation which permits cities to pursue most policy measures. In some cases, as with parking and traffic management, the detailed national regulations are perhaps too prescriptive and limit innovation. National and European legislation affect safety, air and noise pollution and greenhouse gas emissions, but in all but the first of these enforcement of standards is somewhat lax. Recent legal judgments, however, appear likely to strengthen the application of EC air pollution standards [22]. Competition law has a significant impact on cities' ability to integrate public transport services, fares and information systems.

Pricing and taxation Taxation of vehicles and fuel is determined nationally largely independently of transport policy. Parking and road pricing charges can be determined by cities, subject to government oversight. Rail fares are in part regulated by national government, with freedom for private operators to set others. Bus fares are largely determined by the private sector, although there is a national scheme for free travel for the elderly. There is thus no means by which consistent pricing signals can be sent to all transport users.

Finance The principal sources of financial support for city transport are national government, fares and charges and local taxation, with limited investment by the private sector. The underlying concept of the TPP and LTP systems was that the majority of national government support would be provided as a block grant with flexibility for cities to use that funding as they thought best. As May [14] notes, those arrangements were gradually dismantled under TPPs, reintroduced under LTPs, but subsequently withdrawn. The present government allocates most funding competitively. Some of this is under specific modal programmes, with little attempt to ensure co-ordination of funded projects. But increasingly funding for package approaches is being provided through competitive Local Growth Deals for Strategic Economic Plans. There

has been, throughout the history of TPPs and LTPs, a bias towards capital funding and away from revenue funding, which has made it harder to implement lower cost and typically more cost-effective management projects [23].

Monitoring and research Under the LTP system, government initially imposed rigid and perhaps excessive requirements for monitoring. It also established an advisory Commission for Integrated Transport and was planning to finance a UK Transport Research Centre. The latter was abandoned, and the Commission wound up, in the early years of the 2010 government. Monitoring is now left largely to cities, and affected by lack of resources, institutional barriers and weaknesses in quality. There are thus limited opportunities for benchmarking. Some government supported initiatives such as those for cycling have been monitored and evaluated, but there is little support for the evaluation of novel transport interventions.

4.2 France

National policy In France, Plans de Déplacement Urbains (PDU) – the French version of Sustainable Urban Mobility Plans (SUMP) - were created by the 1982 domestic transport orientation law. However, their development really started with the 1996 air quality law, which made them compulsory for urban areas of over 100,000 population. Since then, the regulatory framework has been extended to improve the compatibility with land planning and other planning documents (regional land use plan, air protection plan), to extend their objectives (accessibility for disabled people, new mobility forms such as car sharing and electric vehicles) and to better define the process itself (environmental assessment, revision procedure). A report from Cerema [24] provides further details on the evolution of PDUs in France in the last 30 years. Since 2014, a series of five new laws impacting urban mobility planning have come into effect. At the national level, the launch of stage 3 of decentralisation emphasises the roles of regions and associations of cities rather than departments and stand-alone cities. These laws also support energy transition in urban mobility via the promotion of low emission and electric vehicles, intermodality and active transportation, and they extend the concept of mobility plans to non urban areas. A large range of actors are targeted: regions, departments, local authorities, cities and enterprises (with compulsory mobility plans for enterprises over 100 persons).

Institutions Since 1982, SUMPs have been promoted by the Ministry in charge of Transport (MEDDE). The ministry is involved via its central and local offices (in regions, mainly for large scale planning, and in departments, principally for legal issues). The links with the Ministry in charge of land planning are also increasing to improve the integration of

mobility planning within land use planning processes. In the field, local authorities are in charge of SUMPs, but they are legally required to integrate their SUMPs with other planning documents at higher levels (e.g. regional plans for intermodality) and / for specific themes (e.g. the environment).

Decentralisation The recent series of laws enhances the role of cities and regions, but the scope of actors' responsibilities remains complex. Roads are the responsibility of cities, department or state, depending on their status. Parking is currently shared by cities (public and on-street parking) in association with private sector, regions (regarding intermodality) and state (law enforcement). Local authorities are responsible for urban public transport, which is specified by the local authority but provided by the private sector under a franchise. Local rail services are operated by the national operator SNCF under contracts with the regions, while national rail services and long-distance coach services are open to competition in the private sector. Cities are also in charge of active transportation, car-sharing and electric mobility, but with private sector involvement.

Support for SUMPs The support from national government to cities includes guidance on methodology, the state of the art, and a catalogue of measures (see www.certu-catalogue.fr, the on-line library disseminating free and charged documents). Ministry services are also involved in the PDU process itself at different stages. At the outset, they introduce cities to the PDU principles, including the legal framework, objectives and process. As a statutory consultee they are involved in the PDU process and at the end they give an opinion on the PDU decided upon by the organizing authority. Eventually, they also have to do an a posteriori legal check once the PDU is about to come into force.

Participation and political support The political support for PDUs is strong from both the national level (as shown by the recent series of laws), and the local level. Almost all cities over 100,000 inhabitants have a PDU or are engaged in the process of having one, which is compulsory, and numerous smaller cities have freely engaged in the mobility planning process (producing either a PDU or another form of document). Therefore the challenge with participation is now not in the political support, but rather in the involvement of citizens in the process to improve the effectiveness of the PDU. The legal framework requires nothing more than a final public inquiry. Some cities have therefore initiated more participative approaches to create a real dialogue with citizens throughout the process. [25] gives an overview on some such experiences and draws lessons and recommendations from them in order to support their spread in France.

Laws and regulation The French legal corpus is now substantial. It requires the effective involvement of all actors (state, regions, local authorities, private sector). It enables the support for national objectives (e.g. pollutant emission reduction) at the local level either directly or through national and regional frameworks imposed on PDUs. However the proliferation of planning documents demanded may cause complexity in the cities' planning processes. The recent laws, proposing a first merger between mobility and land use planning, are an attempt to reduce this complexity.

Pricing and taxation National government determines vehicle and fuel taxes, with a tax incentive for diesel compared to petrol. Local authorities define parking charges, but levels of fines are under national government responsibility until 2018, when they will be transferred to local authorities. Local authorities also set the urban public transport fares. Until 2005 the government could define a maximum annual percentage increase for social reasons. Since 2005, its action has been limited to fares for disadvantaged persons. Despite this decrease in price control, the average fares have decreased between 1995 and 2012. This is a strong signal of the will to increase the use of public transport. Today, urban public transport pricing follows two leads: social pricing to ensure that low-income persons can access mobility, and intermodal pricing to support the use of several modes and networks [26].

Finance Cities are mainly financed by national government, fares, charges and local taxation. Local taxation includes a tax dedicated to public transport funding, called the "versement transport" [27]. This tax, paid by firms with ten or more employees, finances 40% of the public transport budget, which exceeds the contribution from fares. Transport infrastructure management is financed by the corresponding responsible authority (either public or private), while the funding of new infrastructure involves national and local authorities, potentially with an involvement of the private sector.

Monitoring and research At the national level the global state of progress of PDUs is regularly monitored. Laws require cities to assess their PDU every five years and, if needed, to update it. However, the Ministry has only limited capacities for active monitoring. Moreover, it only has a few sanctions available for those cities which do not monitor and update their PDUs; these include programmes for financing public transport infrastructure, where cities are required to have a PDU to be eligible. As a support for cities in their mobility planning, the Ministry continuously finances methodological, state-of-the art and assessment studies, e.g. via the creation and the financing of Cerema, a public body which supports national and local authorities in the field of sustainable development. This enables cities to implement more effective

PDUs and provides feedback from local innovations to the central Ministry.

4.3 Germany

National policy The federal government has important planning responsibilities influencing urban development; these are the definition of the overall national spatial planning principles, the construction and maintenance of federal transport infrastructure and the urban development law. For spatial planning a common framework for the federal and the state governments is defined. Federal and state governments coordinate their regional planning concepts and policies with the overall planning in a Ministerial Conference on Regional Planning. The Federal Transport Infrastructure Plan is set up by the federal ministry of transport and is adopted by the Federal Cabinet. These five year plans cover all of the planned road, rail and waterway projects and their maintenance requirements, and will impact on urban transport.

Within the Federal Building Code principles and practices of sustainable urban planning and development are regulated. In addition, instruments are identified which are available to the communities. According to the Federal Building Code, land-use plans (zoning and development plans) should prevent urban sprawl, protect the natural resources and contribute to sustainable development. The "Baunutzungsverordnung" provides rules on the type and degree of building and land use and construction. These planning related policies determine urban development and in particular urban transport. As discussed more fully below, there is no federal or state requirement for SUMP.

Institutions Besides the federal level the 16 states are the major political authorities. They all have their own transport planning processes and plans, which have to be coordinated with national policy. A working group of the Research association for transport (FGSV) has released new guidelines for mobility master plans [28]. FGSV guidelines are not binding, but their application is strongly encouraged, and they serve as key reference documents for planning activities. There are other organisations, focusing on urban transport planning. One of those organisations influencing the debate is the German Association of Cities (Deutscher Städtetag), which have an expert commission for transport planning. In many Federal States so called 'Zweckverbände' (cooperative associations for public transport planning) carry out public transport planning for several local authorities.

Decentralisation Due to the different policy levels (federal, state, and city) responsibilities are very complex. Indeed, in some states there are also regional administrations, though their powers are limited. However, there is a constitutional guarantee of local autonomy and the local planning authority

has the right to determine urban development. As the legal basis for land use planning is defined by the Federal or State Government the scope of the municipal planning authority is directly affected. Cities are responsible for the traffic on their territory except for long-distance rail and autobahns. Most public transport companies are still owned or controlled by the city even if they are private companies. Public transport planning is mainly done by transport associations often differentiated into road and rail public transport. Parking is solely in the hands of the cities.

Support for SUMP There is no financial support for the development of a SUMP from the federal or the state level. Since there is no requirement for SUMP, there is no statutory guidance. However, as noted above, adoption of the FGSV guidelines is strongly encouraged. The German Institute of Urban Affairs (Difu) is the largest urban research institute in the German-speaking area and is the research, further training and information institution for cities, municipalities, administrative districts, municipal associations and planning departments. Difu's objective is to work in the interests of the general public, particularly of the cities, municipalities, associations of municipalities and their enterprises as well as of the citizens. They provide for example special training to cities how to improve their cycling infrastructure (Fahrradademie).

Participation and political support Guidance on formal participation in transport and land use planning is provided by the Federal Ministry, and since the dispute over Stuttgart's new railway station there has been an increasing encouragement to involve the public earlier and more intensively. There is no legal obligation for public participation in SUMP, however it is recommended. Many of the frontrunner examples of participation in Germany involve the public in the beginning of the planning process (e.g. Bremen, Leipzig) or in the final phase of planning (e.g. Dresden).

Laws and regulations The responsibility for urban mobility plans lies with local authorities, and in some cases also with regional associations. But there is no legal obligation to develop an urban mobility plan for German cities. Most (large) German cities have some kind of urban mobility plan, which is frequently called a Verkehrsentwicklungsplan (VEP, transport development plan). Due to the lack of obligation there are some larger cities with no, or at best an outdated, urban mobility plan. In contrast, a public transport plan (Nahverkehrsplan) is obligatory for local authorities in all Federal States (except Hamburg). Luftreinhaltepläne (clean air plans) and Lärminderungspläne (noise reduction plans) are obligatory to satisfy EU directives and the national legal framework. The lack of a legal framework has been recognised by the Federal Environmental Agency (Umweltbundesamt – UBA), which in 2001 commissioned a

study of a possible legal framework for mandatory transportation planning in regard to the environment as a contribution to the local Agenda 21 process. The study proposed a Municipal Transportation Planning Act [29]. The study analysed the current shortcomings of urban mobility planning in Germany and concluded: “According to our analysis, informal local transportation planning is subject to structural deficits which cannot be expected to be rectified substantially without enacting a sufficiently guiding legal framework.”

Pricing and taxation The federal and state parliament and the city council decide on the amount of tax they levy. The federal level receives for example the fuel tax and the state the car tax. Parking charges are determined by cities. Public transport fares are largely determined by the private sector, although there are state schemes for reduced travel fees for special user groups.

Finance Up to now the state and local level receive a federal budget for transport infrastructure projects. For the implementation of transport projects the federal level provides co-funding through the state.

Mobility plans have been de facto necessary to obtain federal co-funding. The focus of this funding is on infrastructure and rolling stock. The funding is different for each state, as local conditions are taken into consideration. Currently, the federal infrastructure financing system is under reform and by 2020 all federal funds could be phased out. There is a current discussion among experts on how the financing of local transport could be secured in the future.

Monitoring and research Only some of the existing urban mobility plans include monitoring and evaluation for the planning process and implementation of all measures. Monitoring and evaluation of individual projects is, however, commonplace. The Federal Environmental Agency (Umweltbundesamt, UBA) suggests quality criteria and indicators for quality assurance of urban mobility planning on a voluntary basis.

4.4 Romania

If there is a compact description of the SUMP effort in Romania, that description is “catching up”. A major and laudable effort is currently being deployed to develop SUMP in 18 Romanian cities and municipalities. Unfortunately, because of the lack of general education on the mobility issue of the population, businesses, technicians and the political class, this catching up appears as an imported concept, not a home-grown need and phenomenon, and it occurs with little coherence or coordination.

National policy The government submitted to the EU the Romanian National Transport Master Plan, in an attempt to

coordinate all efforts related to mobility and transport, from the national scale to the urban scale. Even if aspects of it can be, and have been, criticised in Bucharest and in Brussels, the Master Plan is a major step towards policy coordination in the transport sector at all levels.

Institutions However, the national government in Romania is the weak link in the relationship between the European Union, which is concerned to enhance the quality of urban transport, and the individual Romanian cities, which have (as they discovered) the direct responsibility for designing and implementing SUMPs. There is no coordinated national policy on mobility and transport, the responsibilities for them being divided between agencies which do not talk much with each other. The Ministry of Transport (MT) is focused on the national transport infrastructure, roads and highways, railways, and water and air transport. Cities and municipalities are outside its interest, as they come under the jurisdiction of the Ministry of Regional Development and Public Administration (MDRAP). With the local administration being transferred from ministry to ministry, one cannot expect a local mobility policy that is coordinated with the national plans. At the national level, there is little coordination between the Ministry of Transport, the Ministry of Regional Development and Public Administration, the Ministry of the Economy, and the Ministry of European Funds.

Decentralisation Traditionally, each city and municipality developed its own transport plan, in most cases in response to local traffic pressure and hardships. On the technical level, there is no coordination between the transport/mobility experts and the land use/planning experts, to say nothing of the social and environmental aspects of development. Like in other European countries, cities and municipalities are responsible for roads, traffic and parking, and for planning decisions which influence transport demand. Public transport services are provided by autonomous entities, under the government's competition laws. Rail services are operated by the private sector under franchises awarded by central government (the Ministry of Transport). The Ministry of Transport does not, as yet, monitor and audit the performance of cities.

Support for SUMPs SUMPs are now being developed in the context of European strategy and policies. The SUMPs are required to take into consideration the national policy such as the Regional Development Plan, Territorial Planning Strategies and Transport Master Plan. Preparation of SUMPs was facilitated by EU and national funds under the Regional Operational Programme, for both 2007–2013 and 2014–2020. The time frame for the design of a SUMP was appropriate, i.e. 1–2 years. Most of the SUMPs are currently under preparation; they have to be approved by the local authorities and need Strategic Environmental Assessment approval. The

guidance and support available was the EU guidance (ELTISplus, 2014) and national legislation (norms to the law 350/2001 revised in 2013).

Participation and political support In all documents that have to be approved by the local or central authorities, public consultation on a SUMP is mandatory. Yet, the effectiveness of the public consultation is questionable because of the weak involvement of the citizens and civic organizations in the areas of public decision and public policies. Political support by central government seems to be very weak (only the Ministry of Regional Development and Public Administration has limited involvement) leaving the political responsibility in the hands of the local authorities. Many of the local authorities are directly interested in supporting SUMP development and implementation because it will give their cities and metropolitan areas better arguments when applying for EU funding.

Laws and regulations There are national plans (the Regional Development Plan, the Territorial Planning Strategies, the Transport Master Plan), EU guidance and national laws (i.e. law 350/2001 revised in 2013) which have to be taken into consideration in local SUMP design and development, but the responsibility and decisions for the urban mobility plans lies with the local authorities (cities and/or metropolitan agencies). The local authorities have no legal obligations to develop SUMPs but many of the larger cities have SUMPs under preparation (8 of them with the support of the European Bank for Reconstruction and Development – EBRD) because SUMPs are powerful instruments when applying for EU and other funding. However, the Romanian National Transport Master Plan has been criticised for its failure to provide the legislation and regulation necessary to facilitate effective local decision-making.

Pricing and taxation Taxation of fuel is determined nationally but the vehicles are subject to local government taxes on vehicle ownership. Some cities impose controversial local taxes on using the roads by non-residents (e.g. the Constanta city – Mamaia resort access tax). Parking charges are determined by the local authorities, where the parking lots are city property, or by the private operators in the case of private parking facilities. Public transport fares are, in many cases, partially supported from local public funds (many cities are also the owners of the public transport operators) and usually there are special fares as well for special social groups (e.g. elderly people with low income, students, etc). Until now, the tendency has been to keep the public transport fares as low as possible for political rather than efficiency reasons.

Finance The principal source of financial support for urban public transport and infrastructure is the city's local budget

(local taxes on citizens and companies, municipal loans, etc) with very few public works being financed by public-private partnerships.

Monitoring and research Since the Romanian cities SUMP are still under preparation, it is difficult to assess their implementation monitoring mechanisms and the procedures for future improvements. However, it is important to stress that the SUMP currently under preparation include terms of reference and requirements for monitoring, evaluation and reporting systems.

4.5 Spain

National policy At national level there is a Plan for Transport and Housing Infrastructure 2012–2024 (PITVI), which is a compilation of strategic objectives and actions (with regard to high speed rail, roads, ports, air transport, freight) where the SUMP are only mentioned in “the SUMP elaboration by the local authorities will be endorsed”. It is noticeable that an urban transport policy is missing. Sustainable Urban Mobility Plans (SUMP, Planes de Movilidad Urbana Sostenible - PMUS) in Spain are not mandatory, except in the region of Cataluña, whose regional government passed the Mobility Law 9/2003 [30]. In any case, municipalities are responsible for the elaboration and implementation of the SUMP. Despite this, several Spanish municipalities have implemented a SUMP. However, in the absence of a common agency in charge of monitoring the SUMP, it is not easy to know exactly the number of SUMP implemented in Spain. It appears that around 200 of the 8000 municipalities in the country may have done so. As example, in the region of Madrid there are 26 SUMP implemented, including Madrid City, out of 179 municipalities in the region.

Institutions The Spanish regions have responsibilities for transport and mobility planning within their territory, but municipalities are sovereign over their land. Municipalities cover most of the urban mobility issues, but there needs to be a body to coordinate and develop joint strategies and actions, most of all between regions and municipalities. Urban transport planning in Spain consists more of modal plans than true integrated planning. For example, Madrid has a Public Transport Infrastructure Plan; a Plan for the extension of the Metro network; a Plan for Interchanges (both “macro” and “micro”); a plan for exclusive busways for buses accessing Madrid; and plans for park & ride and bicycle provision. Where there is a public transport authority (e.g. Madrid Region or Barcelona metropolitan area) we find some examples of transport planning at a regional level, and a step forward in delivering a putative regional SUMP, which is not binding but can be helpful for the local authorities when implementing their local SUMP. Other institutions dealing with SUMP issues are

Departments for the Environment, Economics and Industry. At a local level, even the Police Departments are responsible for providing pedestrian or parking schemes.

Decentralisation Spain is formed by 17 Autonomous Communities (or Regions) with competences in health, education, housing and territorial planning among others. Urban public transport rests with the municipalities, but where a Public Transport Authority (PTA) has been created, they give up these competences to the PTA. The metropolitan/suburban/regional transport is the responsibility of the Regions (or PTAs where exist). Apart from managing the PT services (fares, contracts with public and private transport operators, and the like), these PTAs plan the infrastructure and promote the creation of SUMP at a local level. Urban planning, parking, traffic and street management remain local issues; thus there is a lack of regional planning on these issues.

Support for SUMP In the period 2004–2012 there was strong support for SUMP thanks to a national funding programme. The national government allocated 4300 M€ to IDAE (Energy Saving and Efficiency Agency) to select projects which reduced the energy consumption in different sectors (transport, industry, agriculture, housing). Within transport, the focus was to be more energy-efficient and to promote sustainable mobility, including funding of electric cars, bike-sharing schemes, studies to improve PT use and SUMP [30]. Most of the existing SUMP were implemented thanks to this programme, but monitoring and updating of those SUMP is missing. The IDAE agency acted as the main promoter of the SUMP, and published a guide called “Practical Guide to elaborate and implement a SUMP” ([31]). The Guide was developed in close cooperation with two National Ministries for transport and environment, the Association of Spanish Municipalities, and the Madrid Public Transport Authority. It is non-binding, but is a very practical, useful and user-friendly document, that has facilitated the SUMP process in many municipalities. However, it still lacks guidance on targets, indicators and monitoring of SUMP, and there is still no clear regional or national policy strategy on mobility matters.

Participation and political support Some SUMP have considerable political support with strong public commitment and public participation. Other SUMP have remained on the shelf, ostensibly to show the commitment of a council to the sustainable mobility. Since the SUMP are not mandatory and do not have a formal structure, local authorities are free to join the process, and to decide how citizens participate in it.

Laws and regulation There has been considerable discussion on the need for national legislation on SUMP. Nevertheless, beyond some timid attempts, nothing has been done up to now, and it is unlikely that this will happen soon. In 2011

the national government passed a law linking the national funding for public transport to the implementation of a SUMP in those cities with more than 100,000 inhabitants. Theoretically, this should have encouraged municipalities to adopt a plan before 2014, but there is no evidence that any city was penalised for failing to do so [30]. However, there are other regulations that affect some elements of SUMP, including the Sustainable Economy Law, which requires a local authority to have a SUMP in order to receive national funding for its urban transport.

Pricing and taxation PT fares are set by the PTAs (where they exist), or local authorities. The cost of the public transport operation is covered by fares and subsidies coming from all levels of public administration (national, regional, local governments). The national government collects the tax on fuel, and the local authorities collect parking charges and traffic tax (per type of car). There is no tax dedicated to PT services.

Finance SUMP measures are financed by the local authorities. The national government invests in major national infrastructure (highways, airports, train stations, etc.), as do the regions. Local authorities have had access to national funding infrastructure programmes, but in many cases, the funded projects proved not to be the most cost-effective. The new National Fund of Energy Efficiency, intended to contribute to the European Union's common framework of measures for the promotion of energy efficiency, allocates 160 million euro for energy saving and efficiency projects, including transport measures such as modal change, green transport plans, fleet management, and eco-driving (CIVINET [32]).

Monitoring and research As stated before there is a lack of SUMP monitoring and evaluation. In spite of the effort to develop SUMP, little or nothing has been done to follow-up and update the SUMP currently implemented.

4.6 The Netherlands

National framework The Dutch have a long established planning culture, with an increasingly integrated approach to planning. In 2004 the national traffic and transport strategy was defined in the White paper Mobility [33], which in 2013 was succeeded by the national policy for infrastructure and planning [34]. In the Netherlands the overall policy on spatial planning, traffic and transport is embedded both politically and legally. The most relevant policy for SUMP development at a national level is the SVIR ([34]). The SVIR is an integrated plan covering both spatial and transport planning at a national level and sets the boundaries for spatial, transport and mobility planning at national, regional and municipal levels.

Institutions Since 2010 the national policy has been developed and implemented by the Dutch Ministry for Infrastructure and Environment. This Ministry sets the national policy and is responsible for rail infrastructure and operations and the national highway network. Other road owners are provinces (regional network), municipalities (local network) and the regional water authorities. Bus services are operated by private companies, and these are tendered in large regional contracts (called concession areas). These bus services are owned and tendered by the provinces and two regions (Rotterdam Den Haag and Amsterdam). There are 14 authorities that manage transport concessions, which are tendered every 6 to 10 years. However, a truly integrated approach to transport policymaking at a municipal level is hampered by the limited influence municipalities have over different aspects of the mobility, e.g. PT modes. Municipalities typically develop a Master Plan for the city every 10–15 years. Usually such plans take into account the national and regional context. The Master Plan sets the vision and ambition for development of the city in terms of spatial planning, mobility, environment, health and climate. The mobility aspects of the Master Plan are often translated into a mobility plan (GVVP).

Support for SUMP Cities are encouraged to develop GVVPs, and required by law to have coherent traffic and transport policies. Although GVVPs are very similar to SUMP [9] they do differ in a number of substantive ways (Goudappel Coffeng [35], [36]). The following elements are more emphasized in a SUMP than in a GVVP:

- Integrating climate and energy goals into traffic and transport plans;
- Development of scenarios;
- Cost-effectiveness analyses;
- Cost-consciousness;
- Formulating (SMART) measurable goals;
- Integrated and interactive approach;
- Applying all steps of the policy cycle.

This apart, there is no national incentive for the municipalities to develop a GVVP. The Dutch strongly commit to the subsidiarity principle, which is why local planning is the responsibility of local authorities. The Ministry is supportive of a more integrated approach to planning; however there is no formal requirement to start developing SUMP.

Participation and political support In the Netherlands citizen and stakeholder participation is a legal requirement with which municipalities comply. Citizens and other stakeholders have the right to provide their feedback and in later stages of plan preparation they have the right to appeal. The extent to which participation takes place in practice differs. Some municipalities pursue a truly participative approach in which all

stakeholders are involved in all stages of the planning process. Less frequently a minimal approach is followed and citizens are for instance only informed and invited via the formal procedures. Once the plan has been decided upon, the level of participation in implementation is more limited.

Laws and regulations The legal basis for spatial and transport planning is established in the Traffic and Transport plan Act) of 1998 [37]. The Plan wet Verkeer en Vervoer requires the provinces to include key elements into regional policy plans. These regional plans are called regional traffic and transport plans (RVVPs) or provincial traffic and transport plans (PVVPs) and the local or municipal plans are called GVVPs). Section 8 of the Dutch planwet (planning law) states that Dutch municipalities need to provide coherent traffic and transport policies. In essence municipalities are not obliged to develop plans; however they are obliged to integrate transport with other policies. Under this law the Province has the right to oblige municipalities to provide a municipal traffic and transport plan. The law states that municipalities have to translate national and regional policies into municipal policies and that they have to take into account the policies and plans of neighbouring municipalities. During the policy preparation authorities are legally bound to the principles of ‘proper policy making’. This includes providing proper argumentation and substantiation for intended policies and measures and offering substantial opportunities for citizens and stakeholders to express their views.

Pricing and taxation The national government decides on the amount of car ownership tax they levy and the maximum amount the regions can levy. This is the only tax measure the provinces can use to raise money from their inhabitants, and is used for mobility but also for other purposes (MVBZK [38]). There are additional national car related taxes on leased cars, fuel and purchase/import tax. Public transport fares are largely determined by the transport organisations together with the concession holders. In addition there are state schemes for reduced travel fees for special user groups. There are no pricing mechanisms for car use at a municipal level except for parking fees.

Finance Common revenue streams for Dutch municipalities deployed for mobility include contributions from regional and national authorities, parking charges and public transport fares (but only where the municipality is operator).

Monitoring and research Monitoring of local transport plans is rarely done. In 2012 KPVV reviewed eight local plans of which only one had a monitoring plan in place. KPVV indicated several reasons for not monitoring GVVP’s: lack of resources (manpower and financial) and a political focus on day to day business rather than longer term evaluation

(Goudappel Coffeng [35]). Evaluation of individual measures is more common, as is the case with national policy decisions for traffic and transport funding.

5 Discussion and recommendations

The first aim of our detailed review of six countries’ approaches to SUMP’s was to test the appropriateness of the initial set of recommendations listed at the end of Section 3. That initial set of recommendations formed an effective basis for identifying and cataloguing the principal characteristics of national policies as they affect SUMP’s. However, we noted the following additional desiderata:

- decentralisation also needs to ensure, where possible, co-ordination of all elements of transport policy at a local level;
- the legal and regulatory framework also needs to be coherent and enforceable;
- the financing and investment streams need to discourage an undue emphasis on infrastructure investment.

With these additional requirements in mind, we have finalised our set of recommendations for national policies on SUMP’s. In its advice to national governments we advocate that the Commission should provide advice to national governments on how best to:

1. establish a national policy framework for urban travel which supports and influences policy on land use, health and the environment and maintain consistency in that policy framework over time;
2. improve institutional coordination and cooperation, horizontally between national policies and vertically between tiers of government;
3. decentralise responsibilities where possible and centralise them where necessary while facilitating the coordination of all elements of transport policy at a local level and maintaining a national auditing role over cities’ performance;
4. support local or regional authorities in the development, appraisal, monitoring and evaluation of integrated, sustainable, urban travel strategies and encourage the development of the technical skills required;
5. encourage effective public participation, partnerships and communication and provide effective political support for the policies adopted;
6. provide a supportive legal and regulatory framework, particularly for public transport, demand management, emissions and safety, which is both coherent and enforceable;

7. ensure a comprehensive pricing and fiscal structure which sends appropriate signals to users and operators;
8. rationalise financing and investment streams so that they are consistent across all modes and avoid any undue bias towards infrastructure-based solutions;
9. improve data collection, monitoring and research, particularly by carrying out consistent monitoring of the implementation of urban transport policies.

In summarising the current situation in our six countries, we found it helpful to subdivide these nine recommendations into a set of 20 criteria. These are shown in Table 4, using a notation in which criteria 1a and 1b, for example, are the elements of recommendation 1. We summarise the situation in our six countries against these 20 criteria in Table 4 using a three-way categorisation of the degree to which each criterion is adopted.

Unsurprisingly, there is a considerable difference between the six countries. In part these inconsistencies can be explained by difference in governance structures; for example, a federal structure such as Germany's can be expected to show a more limited role for the national (federal) government. In part, it can be explained by the differing lengths of experience of SUMP, with Romania only now starting to develop them, Germany and Spain yet to be committed to a formal process, and the Netherlands giving cities the freedom to decide

whether to develop GVVPs. Yet it is interesting that there are marked differences between England and France, both of which have been developing SUMP for over 30 years. This can be explained at least in part by a tendency in the UK for each successive government to change what its predecessor has implemented, while in France successive governments have tended to build on earlier procedures, but perhaps make them more complex.

The situation in Romania is particularly acute, and may well reflect the position in several other Eastern European countries. In part this arises from the lack of experience of local governments, the scarcity of expertise, and the general lack of education of local administration regarding not only urban mobility, but planning in general. But recent history has also played a part. During the period of transition to a market economy, planning had little support, as "democracy" was wrongly interpreted as total freedom to do whatever each individual wanted to do. The extreme case was the impossibility to plan and build streets in cities because private property was deemed sovereign and untouchable. The result has been a chaotic urban development, with a 6–10 tenfold increase in the number of cars in the cities and a lack of coordination and regulation for urban mobility. As an illustration, Bucharest has over one million cars over an area of 100 km², a car density 5–6 times that of Vienna. In the current situation, there is

Table 4 An assessment of the six countries against the Advisory Group's recommendations

| Criterion | England | France | Germany | Romania | Spain | The Netherlands |
|---------------------------------|---------|---------|---------|---------|---------|-----------------|
| 1a National framework | Partial | Yes | Partial | Partial | Partial | Yes |
| 1b Consistency over time | No | Partial | Yes | No | No | Yes |
| 2a National coordination | No | Partial | No | No | Partial | No |
| 2b Vertical coordination | Partial | Yes | Yes | No | Partial | Yes |
| 3a Decentralisation | Partial | Yes | Yes | No | Yes | Yes |
| 3b Local coordination | Partial | Partial | Partial | No | Partial | Partial |
| 3c National audit | No | Yes | No | No | No | No |
| 4a Guidance on SUMP | Partial | Yes | Partial | Partial | Yes | No |
| 4b Skill development | No | Yes | Partial | No | Yes | Yes |
| 5a Participatory framework | Yes | Yes | Yes | No | Partial | Yes |
| 5b Political support | Partial | Yes | Partial | No | Partial | Yes |
| 6a Legal, regulatory framework | Yes | Yes | Yes | No | No | Yes |
| 6b Coherence of framework | Yes | Partial | Partial | n/a | Partial | Yes |
| 6c Enforceability | Partial | Partial | Partial | n/a | Partial | Partial |
| 7a Comprehensive pricing | No | No | No | No | No | No |
| 7b Appropriate signals to users | No | Partial | Partial | No | No | Partial |
| 8a Coherent financing | No | No | No | No | No | No |
| 8b Avoiding infrastructure bias | No | Partial | No | No | No | Yes |
| 9a Support for monitoring | No | Yes | No | No | No | No |
| 9b Support for research | No | Yes | Yes | No | No | Yes |

no real ownership of SUMP at any level: political, administrative, or even technical. There is no education in, or awareness of the SUMP principles and actions in the broad population and, consequently, not much chance for behavioural change. Because of this lack of education, local politicians are afraid to take any effective or radical measures toward a real SUMP, because of a probable public backlash.

What is also noticeable is that for ten of the 20 criteria, few of the countries perform well:

- achieving consistency over time (1b): while there is clearly a case for continuing to improve processes and outcomes, there is a strong case for ensuring consistency so that skills can be developed, and resources are not wasted in redefining outcomes;
- national coordination (2a): since transport affects, and is influenced by, the work of many other government departments, there is a strong case for any national transport policy to be developed interactively with those other departments;
- local coordination (3b): effective SUMPs involve the integration of all modes of transport, and cities' ability to achieve this is too often limited by a lack of direct control over public transport, road provision or, in many cases, land use;
- national audit (3c): since effective SUMPs contribute directly to national objectives, it should be in governments' interests to ensure that SUMPs are appropriately developed, implemented and enhanced; such auditing can also help cities in benchmarking their performance;
- enforceability (6c): laws are only effective if they are effectively enforced; failure to enforce is particularly an issue with environmental legislation, where recent evidence indicates that enforcement may be less than fully effective;
- comprehensive pricing (7a): pricing is an important element of urban transport policy, and cities need to be able to influence charges for all aspects of transport use, otherwise those charges which can be determined will be undermined by competition from other modes;
- appropriate signals to users (7b): charges and regulations should apply at the point of use, and should encourage users to choose the most sustainable options for their journeys;
- coherent financing (8a): cities need to have access to funding streams for all potential policy measures in a SUMP, and to be able to finance those which are the most cost-effective; funding systems which operate differently for public and private transport are unlikely to achieve this;
- avoiding infrastructure bias (8b): most governments have different approaches to funding capital costs such as infrastructure, and revenue costs such as management and

information, and it is often the case that capital is easier to obtain than revenue; this runs the risk that SUMPs will focus on infrastructure projects, despite the evidence that management and information measures are often more cost-effective;

- support for monitoring (9a): cities should be encouraged to monitor the performance of their SUMPs and identify areas for improvement; this can best be facilitated by adopting similar indicators in all cities, and hence enabling benchmarking; governments can assist with this and hence contribute to their audit needs.

While recognising the autonomy of national governments, there is a strong case for the European Commission to offer guidance on all of these topics.

At the same time, there is a strong case for encouraging the 28 governments within the European Union to exchange experience and learn from one another, much as the CIVITAS programme encourages cities to learn from each other. There is clearly a case for Western European governments to compare experience, given the indications from Table 4 that their approaches are very different. But there is an even stronger case for Western European governments to offer advice to governments in Eastern Europe who have more limited experience of SUMPs. Such support could usefully complement the support for Eastern European cities through programmes such as CIVITAS. The mechanism for such exchanges of experience needs to be non-threatening, and designed to reflect the differing political aspirations and governance structures in the countries involved.

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