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EVALUATION

of the 2013 Urban Mobility Package

{SWD(2021) 48 final}

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Glossary

Term or acronym	*Meaning or definition*
CEF	Connecting Europe Facility
EC	European Commission
COM	European Commission Communication
EIP-SCC	European Innovation Partnership on Smart Cities and Communities
EIB	European Investment Bank
ELTIS	**E**uropean **L**ocal **T**ransport **I**nformation **S**ervice, www.eltis.org (European Urban Mobility Observatory)
EMW	European Mobility Week, EU awareness-raising campaign on sustainable urban mobility
ERDF	European Regional Development Fund
ESI	European Structural and Investment Fund
EGUM	Member States Expert Group on Urban Mobility set up by the European Commission
GHG	Greenhouse Gas
IA	Impact Assessment, a process examining whether there is a need for EU action and analysing the possible impacts of available solutions
ITS	Intelligent Transport Systems, transport solutions utilizing state-of-the-art information and telecommunications technologies
KPI	Key Performance Indicator, a type of performance

	measurement
LEZ	Low Emission Zone (a type of urban vehicle access regulations)
MaaS	Mobility as a Service, the integration of various forms of transport services into a single mobility service accessible on demand
NECP	National Energy and Climate Plan, a 10-year integrated plan for 2021-2030 under Regulation on the governance of the energy union and climate action (EU)2018/1999
NOx	Nitrogen oxides, collective term used to refer to nitrogen monoxide (nitric oxide or NO) and nitrogen dioxide (NO2), air pollutants produced during combustion including by motor vehicles
PM	Particulate Matter, a collective name for fine solid or liquid particles added to the atmosphere by processes at the earth's surface, a pollutant considered to be one of the most harmful to human health
pkm	Passenger-Kilometre, unit of measurement representing the transport of one passenger by a defined mode of transport over one kilometre
Shared mobility	It refers in this document to shared use of transport modes, such as sharing of vehicles for rental (e.g. bikes, scooters, cars), ride-sharing/car-pooling (i.e. shared space within a vehicle) as well as transport-on-demand services (e.g. ride hailing services like taxis or Uber).
SWD	Staff Working Document, preparatory/auxiliary document of the European Commission, usually accompanying legislative proposals
SUMI	Sustainable Urban Mobility Indicators, a set of indicators developed by a pilot project funded by the

	European Commission to support cities to perform a standardised evaluation of their mobility system and to measure improvements
SUMP	Sustainable Urban Mobility Plan, a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life
tkm	Tonne-Kilometre, unit of measure of freight transport which represents the transport of one tonne of goods by a given transport mode over a distance of one kilometre
TEN-T	Trans-European Transport Network, Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and urban nodes
UMP	Urban Mobility Package, an EU policy basis of 2013 comprising te Communication "Together towards competitive and resource efficient urban mobility" and annexes
UVAR	Urban Vehicle Access Regulation, a form of traffic management that regulates access in specific urban locations according to vehicle type, age, emissions category – or other factors such as time of day or day of the week
vkm	Vehicle-Kilometre, unit of measurement representing the movement of a road motor vehicle over one kilometre
WHO	World Health Organisation

1. INTRODUCTION

This evaluation examines whether the EU urban mobility policy is fit for purpose and delivers as intended. It concerns the Urban Mobility Package (hereinafter "UMP"), consisting of the Communication "Together towards competitive and resource-efficient urban mobility"[1] as well as the accompanying annex: "A Concept for Sustainable Urban Mobility Plans[2] and four Commission Staff Working Documents:

- 'A call to action on urban logistics'[3],
- 'Targeted action on urban road safety'[4],
- 'A call for smarter action on urban access regulations'[5], and
- 'Mobilising Intelligent Transport Systems for EU cities'[6] .

The Impact Assessment[7] accompanying the Urban Mobility Package foresees an evaluation by 2020 of the uptake of integrated urban mobility approaches[8] in the European Union. In November 2018 the Commission therefore published a Roadmap[9] outlining its plans for this evaluation. An external support study[10] to this evaluation was carried out and is published alongside this report.

The evaluation covers all EU Member States[11] and the period since the adoption of the UMP in 2013 until 2018[12].

This evaluation aims to provide the analysis of the findings, along with evidence-based conclusions and recommendations for any further decisions on the development of the European urban mobility policy. In doing so, it complies with the requirements defined in the Better Regulation Guidelines[13] through the assessment of the following criteria: relevance, effectiveness, efficiency, coherence, and EU added value.

[1] COM(2013)913, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0913

[2] COM(2013)913-annex,https://eur-lex.europa.eu/resource.html?uri=cellar:82155e82-67ca-11e3-a7e4-01aa75ed71a1.0011.02/DOC_4&format=PDF

[3] SWD(2013)524, https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd%282013%29524-communication.pdf

[4] SWD(2013)525, https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd%282013%29525-communication.pdf

[5] SWD(2013)526, https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd%282013%29526-communication.pdf

[6] SWD(2013)527, https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd%282013%29527-communication.pdf

[7] SWD(2013)528 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013SC0528

[8] Integrated urban mobility approach can be understood as a balanced development of all relevant transport modes, while encouraging a shift towards more sustainable modes. It puts forward a set of technical, infrastructure, policy-based, and soft measures to improve performance and cost-effectiveness with regard to the declared goal and specific objectives. Its development and implementation follows an integrated approach with a high level of cooperation, coordination and consultation between the different levels of government and relevant authorities, stakeholders and citizens. Sustainable urban mobility plan (SUMP) is an example of an integrated urban mobility.

[9] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1995-Urban-Mobility-in-the-EU

[10] Provided by a consortium led by Ramboll Management Consulting, 2020

[11] The UK is included as it was still a Member State formally until 31/01/2020.

[12] The analysis has also taken into account the developments between 2018-2020 (including the COVID pandemic), whenever data was available.

[13] http://ec.europa.eu/smart-regulation/guidelines/docs/swd_br_guidelines_en.pdf

http://ec.europa.eu/smart-regulation/guidelines/docs/br_toolbox_en.pdf

2. BACKGROUND TO THE INTERVENTION

2.1. Wider policy context

A large majority of people in Europe (74.9%) live in urban areas, compared to just over 50% in 1950, making Europe one of the most urbanised regions in the world. The growth of the urbanisation rate in Europe is expected to continue, with the proportion of the population residing in urban areas projected to reach 83.7% in 2050.[14] The expansion of population numbers both within and around some of the metropolises in the European Union (EU) is accompanied by a range of complex challenges, such as issues relating to sustainability, social cohesion, an ample supply of housing, or the provision of efficient transport services. Some cities in the EU, however, will have to cope with declining population[15], and an ageing EU population that will require further adaptation of urban infrastructure and services[16]. The ageing of the population has a strong correlation with the number of persons with disabilities or reduced mobility, and will require more emphasis on accessibility[17] for those groups as well as the provision of safe, secure, reliable and adaptable transport services with appropriate solutions for them.

Urban mobility, in particular public transport, plays a key role in local economy and in post-Covid green recovery. Urban and suburban public transport services carry approximately 185 million passengers on an average working day across the EU, providing the backbone of urban mobility in many EU cities. The public transport sector is amongst the largest employers at local level, employing 2 million people in the EU, i.e. 20 percent of the 10 million people employed in the overall transport industry[18].

The Urban Mobility Package is the EU policy instrument in place that aims at helping urban areas address, in a joint and systematic manner, the needs and challenges of modern urban mobility systems and their transition to sustainability. Before the adoption of the UMP in 2013, there were a number of other EU initiatives the field, as summarised below:

European Mobility Week[19] (EMW) was introduced in 2002, calling on European cities and towns to devote one week every year to sustainable mobility, while promoting initiatives and permanent measures throughout the year. The ultimate aim of EMW is to incite behavioural change by raising awareness and promoting sustainable urban mobility.

The **Green Paper on Urban Mobility**[20], adopted in 2007, identifies traffic congestion leading to increased delays and pollution as the main challenge. The proposed solutions, among others, include the promotion of walking, cycling and a less car-dependent lifestyle through enhancing sharing services, and the adoption of new technologies.

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[14] United Nations, Department of Economic and Social Affairs, Population Division (2019): 'World Urbanization Prospects 2018: Highlights (ST/ESA/SER.A/421)'. https://population.un.org/wup/Publications/Files/WUP2018-Highlights.pdf

[15] Some cities in the EU have a relatively high proportion of older people because of an outflow of younger people, reflecting in some cases the high cost of property (for rent or to buy) in many city centre locations and in other cases limited educational and/or employment opportunities. Statistics on European cities, https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_European_cities#Population

[16] The Future of Cities, https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/future-cities

[17] Accessibility for persons with disabilities or persons with reduced mobility will be further referred in this document as '*barrier-free accessibility',* to avoid confusion with other meanings of the word "accessibility".

[18] UITP Open letter, May 2020, https://cms.uitp.org/wp/wp-content/uploads/2020/08/PUBLIC-TRANSPORT-IS-CRITICAL-FOR-EUROPEAN-RECOVERY-FINAL-VERSION.pdf

[19] https://mobilityweek.eu/home

[20] Commission of the European Communities (2007). Green Paper, Towards a new culture for urban mobility. COM (2007) 551 final. Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0551:FIN:EN:PDF

The **Ambient Air Quality Directives**[21] provide the current framework for the control of air pollutant concentrations in ambient air in the EU. The Directives require that where levels exceed limit or target values, an air quality plan needs to be established to address the sources responsible and to ensure compliance with the limit or target value. Such air quality plans shall set out appropriate measures, so that the exceedance period can be kept as short as possible. In urban settings, air quality plans often include measures targeting specifically emissions from transport.

The first comprehensive EU initiative in the field was the 2009 **Action Plan on Urban Mobility**[22] with 20 actions under the umbrella of six themes, based on the Green Paper consultation[23]. A 2013 review of the 2009 Action Plan on Urban Mobility showed that progress had been observed, however in some cases greater effort at national level was needed to move from declaration of intent to commitment to action to increased uptake[24].

Intelligent Transport Systems (ITS) can significantly contribute to a cleaner, safer and more efficient transport system, including in urban areas. The EU framework in this regard, the **ITS Directive**[25], was adopted in 2010 to accelerate the deployment of these innovative transport technologies across Europe.

The **Europe 2020 Strategy** for smart, inclusive, and sustainable growth[26] highlighted the importance of a modernised and sustainable European transport system for the future development of the Union and stressed the need to address the urban dimension of transport.

The **2011 White Paper**[27] set out a strategic vision for the entire EU transport system, with the specific aim of reducing the dependence of Europe on imported oil and at the same time cutting carbon emissions in transport by 60% by 2050. Forty initiatives are included, with some in the area of urban mobility covering urban road pricing and access restriction schemes, Sustainable Urban Mobility Plans, zero-emission urban logistics and travel information to promote alternatives to individual conventional transport.

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[21] Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe. Available at: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32008L0050 and Directive 2004/107/EC of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (Fourth Daughter Directive). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1486475021303&uri=CELEX:02004L0107-20150918

[22] Commission of the European Communities (2009). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Action Plan on Urban Mobility. COM(2009) 490. Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0490:FIN:EN:PDF

[23] The six themes of the Action Plan on Urban Mobility were: 1. Promotion of integrated policies; 2. Focus on citizens; 3. Greening of urban transport; 4. Strengthening of funding; 5. Experience sharing and knowledge; 6. Optimisation of urban mobility.

[24] Panteia (2013). Review of the Action Plan on Urban Mobility. Available at: https://ec.europa.eu/transport/sites/transport/files/themes/urban/studies/doc/2013-07-review-of-the-action-plan-on-urban-mobility.pdf

[25] Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0040

[26] COM(2010)2020 final, https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52010DC2020

[27] European Commission (2011). White Paper; Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. COM(2011) 144 final. Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0144:FIN:en:PDF

2.2. Need for action

The development of the **Urban Mobility Package** was based on a review of the implementation of the 2009 Action Plan, and on the results of a public consultation launched in 2012[28].

During this evaluation process, the Commission has re-constructed the reasons which led to the adoption of the UMP. The UMP intervention logic (see Annex 3) links the underlying problems identified in the market with the objectives set and the measures intended to address the causes of the problems and achieve the objectives. The starting point for the intervention logic was the 2013 impact assessment and its elements have been completed where not entirely specific, in light of the Commission's experience in monitoring the application of the Package.

The impact assessment identified accessibility[29], congestion, road collisions, air pollution, noise and CO2 emissions as **main challenges** affecting EU urban mobility. It also indicated significant external costs of transport in urban areas linked to the current model of mobility, estimated in 2013 at about EUR 230 billion annually. Of this amount, EUR 80 billion was attributed to congestion, EUR 80 billion to accidents, EUR 40 billion to noise, EUR 20 billion to air quality, and EUR 7 billion to CO2 emissions[30].

The analysis also pointed out that the **general problem** was one of regulatory failure at the urban level and that market mechanisms alone are not able to address this situation. This was further exacerbated by the **lack of an integrated urban mobility approach (see below) leading to a lack of effective action at local level**. As a result, mobility within cities had become increasingly difficult and inefficient. The fragmented approaches – lacking common standards or joint procurement – also negatively affected development of the single market for innovative urban mobility solutions.

The **root causes/barriers** for the uptake of integrated urban mobility approaches identified in the 2013 impact assessment were the following:

- Lack of cooperation between sectors, particularly transport and land use, and lack of coordination between different levels of government;
- Lacking or low capacity of public authorities, including insufficient knowledge of the integrated urban mobility concept and scientific state of the art;
- Little political will or lack of political interest, in some cases linked with no public pressure;
- Scarcity of funding for the preparation of Sustainable Urban Mobility Plans and for implementation of actions;
- Existing car-infrastructure orientation within the community (linked with legacy / culture, lobbies and other factors);
- Resistance from established planning and engineering officials.

[28] https://ec.europa.eu/transport/themes/urban/consultations/2012-12-10-urban-dimension_en

[29] When it comes to accessibility, it concerns both the local (urban), regional and international transport networks, as well as people's ability to reach goods, services and activities; the latter is especially valid for persons with disabilities and reduced mobility and is referred in the text as 'barrier-free accessibility'. Despite infrastructure investments in the main corridors, "the last mile" in main European urban agglomerations is often plagued by congestion. The issue of connectivity and fluidity of traffic in the TEN-T urban nodes is therefore relevant for the proper functioning of the whole TEN-T network.

[30] https://ec.europa.eu/transport/sites/transport/files/themes/urban/studies/doc/2013-10-urban-mobility-package-activity-31.pdf. It should be noted that the calculations of external costs of transport were revised in 2019 and are now estimated to be at a much higher level. This is described in more detail in sections 2.4 and 2.5.

The **general objective of the UMP** was to reinforce EU support to European cities, where such support offers added value and while respecting the distribution of competences and responsibilities, for tackling urban mobility challenges so that cities could develop their mobility along a more sustainable path and so that EU goals for a competitive and resource-efficient European transport system were met.

As indicated above, the **formation of an integrated urban mobility approach in the EU was considered essential in that regard**. The central element of the UMP was therefore the **concept of sustainable urban mobility planning (SUMP)**[31] in which the cities could address land use, transport behaviour and transport infrastructure in a comprehensive way in order to deal with the identified challenges and render transport more sustainable, safe and efficient. At the same time, the need for multi-level governance and partnership, as well as the **important role of Member States was recognised**; they were encouraged to take more decisive and better coordinated action to help cities in this regard.

The proposed integrated urban mobility approach would facilitate the achievement of **general EU transport policy goals** such as:

- better accessibility and seamless mobility along the TEN-T network;
- reduction of greenhouse gas emissions from transport (60% reduction called for by the 2011 White Paper, with urban areas accounting for a high share (23% at the time of adoption) of all CO2 emissions from transport);
- reduction of air and noise pollution; and
- improvement of road safety in cities, with cities accounting for 38% of EU's road fatalities and vulnerable users such as pedestrians being particularly exposed.

In addition, it was also intended to help develop the single market for innovative urban mobility solutions.

The general objective translates into two operational objectives:

Operational objectives of the UMP

1. To provide EU cities with, and stimulate the uptake of, a policy framework encompassing important policy issues necessary to ensure an integrated approach to urban mobility, at the latest by 2020.

2. To provide EU urban areas with a framework encompassing all procedures and processes necessary to ensure an integrated approach to urban mobility, at the latest by 2020.

The importance of the above objectives was reflected in the results of the 2013 Eurobarometer[32] survey, which demonstrated that a strong majority of citizens considered congestion, the cost, and the negative environmental and human health impact of urban mobility and transport patterns to be important problems; furthermore, most respondents were

[31] A concept for sustainable urban mobility plans, annex to the Commission Communication '*Together towards competitive and resource-efficient urban mobility*', https://eur-lex.europa.eu/resource.html?uri=cellar:82155e82-67ca-11e3-a7e4-01aa75ed71a1.0011.02/DOC_4&format=PDF

[32] Special Eurobarometer 406 (2013)

rather pessimistic about the prospects for improving the traffic situation in their cities. It also showed that considerable differences existed across the EU, with an increasing 'urban mobility gap' between Europe's few advanced cities and the majority trailing behind.

Taking the above into account and in line with the 2011 White Paper policy objectives, the 2013 impact assessment considered that the way forward for cities was to undertake an integrated urban mobility approach (i.e. sustainable urban mobility planning, SUMP) through which the most effective and efficient measures were identified and subsequently implemented as a package. The integrated urban mobility approach was developed in the analysed **policy options**, starting with the lowest level of EU intervention:

0. Baseline (business as usual: research&development, funding, best practice, campaigns, local capacity building);
1. Non-binding recommendation on sustainable urban mobility plans (SUMPs);
2. Mandatory development of SUMPs by Member States-defined urban areas;
3. Mandatory development of SUMPs by EU-defined urban areas.

The assessment of options based on their effectiveness, efficiency and coherence indicated that, overall, options 2 and 3 would have had the highest positive impact. The legislative options were deemed more likely to reduce the risk that EU cities would not achieve the key EU transport objectives (as defined in the 2011 White Paper) in comparison with the non-legislative options. However, as they were estimated to also be more demanding to implement[33], option 1 was chosen.

Finally, as EU cities were very different in all respects, including on mobility, the specific targets that each city could realistically achieve may vary. It was deemed appropriate that the proposed initiative should be flexible and allow for the differences across EU cities and the different planning and institutional frameworks in the individual Member States. A similar degree of variation in the measures put in place was to be expected and thus the UMP did **not include dedicated targets** related either to overall objectives such as CO2 reduction or specific objectives such as a more sustainable modal split**.**

2.3. Description of the intervention

Catalysing joint action towards more sustainable urban mobility and reinforcing the support provided to European cities through coordinated measures at EU level and in the Member States was at the heart of the intervention. Responsibility for the implementation of the UMP objectives was allocated to the European Commission and the Member States.

The UMP is structured around **four main pillars**[34]:

- Sustainable Urban Mobility Plans (SUMP);
- Coordinating public and private-sector intervention, in particular when it comes to the four fields of urban mobility (see specific recommendations below);
- Reinforcing EU support by (a) providing a forum for sharing experience, showcasing best practice, and fostering cooperation; (b) focusing research and innovation on delivering solutions for urban mobility challenges; (c) providing targeted financial support; (d) reinforcing the international dimension;
- Involving Member States in the urban mobility field.

[33] Because the individual requirements may have to be further developed before they can become part of a binding legislation and the political feasibility might be lower due to subsidiarity principle.

[34] Diagram showing the architecture of the Package and its elements is provided in Annex 4

Moreover, **specific recommendations** (chosen, among others, based on the feedback received from stakeholders) were put forward for coordinated action between all levels of government and between the public and the private sector in four fields (which actually correspond to separate documents accompanying the main Communication):

- Urban logistics;
- Urban vehicle access regulations (UVAR);
- Urban Intelligent Transport Systems (ITS);
- Urban road safety.

In order to deliver, the main pillars were operationalised through a number of **measures intended for implementation by the Commission and Member States**.

When it came to the measures under the responsibility of the Commission, they concerned the dissemination and uptake of best practice and provision of dedicated guidance in relation to the four fields identified above. The Commission was also tasked to set-up and/or launch initiatives and platforms facilitating the achievement of the UMP goals:

- a European Platform on Sustainable Urban Mobility Plans to coordinate EU cooperation on developing the concept and tools further, and provide a one-stop shop;
- a Member States' Expert Group on Urban Mobility to foster an exchange on how national and EU policies on urban mobility and transport can be strengthened and better coordinated;
- a reinvigorated CIVITAS 2020 Initiative[35] under Horizon 2020;
- European Innovation Partnership on Smart Cities and Communities[36].

Moreover, the Commission committed to:

- provide targeted financial support through European Structural and Investment Funds, as well as Connecting Europe Facility (the latter for urban nodes on the Trans-European Network – Transport (TEN-T));
- strengthened support for the Urban Mobility Observatory[37];
- continue to support the development of an Urban Mobility Scoreboard by identifying harmonised indicators to benchmark and compare the progress of urban areas across the EU, and explore how the quality and availability of data and statistics for urban mobility can be improved.

When it came to measures for implementation by Member States, they revolved around them developing a coordinated approach to urban mobility on their territory, and in particular a SUMP framework to coordinate deployment of local transport plans and their integration into a wider urban or territorial development strategy. In that regard, Member States were expected to review – and amend where necessary – the technical, policy-based, legal,

[35] CIVITAS is a network of cities for cities dedicated to cleaner, better transport in Europe and beyond. Since it was launched by the European Commission in 2002, the CIVITAS Initiative has tested and implemented over 800 measures and urban transport solutions as part of demonstration projects in more than 80 Living Lab cities Europe-wide. Following the adoption of UMP, the Commission launched a reinvigorated CIVITAS 2020 Initiative under Horizon 2020, the Union's framework programme for research and innovation for 2014-2020.

[36] The Initiative, launched in 2012 by the European Commission, aims to improve urban life through more sustainable integrated solutions and addresses city-specific challenges from different policy areas such as energy, mobility and information and communication technologies. It looks to facilitate strategic partnerships between industry, European cities and other parties to develop the urban systems and infrastructures of tomorrow and to achieve widespread roll out of smart city solutions.

[37] www.eltis.org

financial and other tools at the disposal of local planning authorities. In relation to coordinating action between the public and the private sector in the fields of urban logistics, road safety, UVAR and ITS, Member States were requested to ensure that these issues were given proper consideration in their national approaches to urban mobility and in SUMPs, and to provide relevant frameworks and platforms for cooperation and exchange of information.

The Package has also an international dimension, notably when it comes to supporting sustainable urban mobility policies in Commission cooperation activities, focusing on developing regions and at the same time paving the way for the export of European expertise and technologies in the field.

Finally, the Commission and Member States were expected to jointly facilitate the creation of a single market for innovative urban transport solutions, e.g. by developing common standards and technical specifications or by facilitating joint and clean procurement.

2.4. Baseline and points of comparison

The baseline describes those developments (throughout the evaluation period) that could have been expected in the absence of the UMP. It is the hypothetical scenario against which any actual effective changes, attributable to the initiative, are measured.

The Impact Assessment identified the situation in 2013 before the UMP was adopted. It concluded that the legislation that was already in place was expected to bring a gradual improvement in certain areas such as emissions and noise levels, increased road safety, but their impact towards an integrated urban mobility approach would remain uncertain. It also assumed that the percentage of cities without any form of integrated urban mobility approach will decrease.
However, the Impact Assessment did not provide for a quantification of the policy options tested which would have allowed to assess the future situation in the absence of the UMP. Furthermore and as explained in section 3.1, a number of policy and legal initiatives have occurred since the adoption of the UMP, which have an impact on the same (or parts of) policy area. Therefore the impact of the UMP is hard to evaluate because it is based on diffuse actions being taken by multiple actors and in different contexts, usually on a voluntary basis which means that there was little systematic reporting. There have been a number of positive results, but it is difficult to attribute them with certainty specifically to measures taken under the UMP alone.

An additional important limitation stems from the fact that data on urban transport activity is neither systematically nor coherently collected by EU Member States. This is a serious underlying flaw and underlined by the Court of Auditors in their recent report[38]. For this reason, model estimates have been used instead, which take into account the implementation of the UMP, complemented by a qualitative assessment. The support study contains further details on the approach adopted using best practice examples where relevant.

With those qualifying remarks, the paragraphs below show how the trends related to developments in the area of urban mobility have evolved over the past decade.

[38] European Court of Auditors, Special report 06/2020: Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment. Available at: https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=53246

Under the current economic and legal framework, the **main trends** identified in the Impact Assessment of 2013 in the absence of the EU intervention are confirmed, as illustrated by the estimated **evolution of a number of key performance indicators between 2010 and 2018**[39]:

- **Urban transport activity** has continued to increase: goods transport volumes rose by nearly 13% and passenger transport volumes by almost 8%; also as expected, transport demand and modal choice differ widely between European cities, and depend on a wide range of factors. In the same period the urban population increased from 72.9% to 74.5% of the total population in the EU[40].
- **Motorised urban passenger transport** represents a stable share of the total land transport activity across Europe (around 28%).This trend is confirmed by the fact that passenger car ownership in Europe continued to grow (in particular in EU-13), with 477 676 passenger cars per 1000 inhabitants in 2010 versus 515 682 of them in 2017 for EU-28 on average; at the same time, the share of diesel cars in the total passenger car fleet rose from 35,2% to 42%[41].
- Over the last decade there has been no significant change in the **modal share** of transport modes, with nearly 80% of urban passenger-kilometres being made by private car[42].
- **CO_2 emissions** from different transport modes at urban level have remained at roughly the same level in the last decade[43], with passenger transport responsible for a much larger share (75%) than freight; private cars remain the single biggest source, responsible in 2018 for almost 70% of the total CO_2 emissions from urban transport; urban emissions represent approximately a quarter of total transport emissions and they are clearly not on track to reach the decarbonisation ambitions of the European Green Deal[44].
- On **air quality**, there has been a significant decrease in nitrogen oxides (NOx) and particulate matter (PM) emissions over the last decade (mostly due to improved vehicle technology), but insufficient to reach air quality limit and target values in line with EU legislation; concentrations of NO_2 and PM_{10} continue to exceed EU limit values, as confirmed in the European Environment Agency 2020 Air Quality report[45], with cities (including port cities[46]) facing the biggest challenges and 74% of the EU urban population remaining exposed to harmful (including carcinogenic) PM2,5 concentrations above WHO air quality guidelines.

[39] Source (unless stated otherwise in case of additional data): Reference Scenario 2016 update, PRIMES-TREMOVE model (E3Modelling) and external contractor's interpolation for 2018. PRIMES-TREMOVE transport model is developed and maintained by E3Modelling.

[40] https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=EU

[41] https://www.eea.europa.eu/data-and-maps/indicators/size-of-the-vehicle-fleet/size-of-the-vehicle-fleet-10

[42] While in the cities in the western part of the EU the share of cars has stabilised or slightly dropped, many cities in the eastern part saw increases in both car ownership and modal share. For example, out of 13 cities that provided comparable data on modal share in the Court of Auditors report, car share dropped only in Antwerp and Bordeaux and went significantly up in Budapest.

[43] 293 million tonnes in 2018

[44] 50-55% reduction on average for all sectors in 2030 and a climate neutral economy by 2050, implying a 90% reduction in the transport sector emissions by 2050 compared to 1990. In addition, urban transport tends to cause more CO2 emissions compared to inter-urban transport per kilometre due to the characteristics of urban driving, which generally results in more accelerating and braking thus requiring more energy and emitting higher levels of CO2.

[45] EEA report (2020). Air quality in Europe 2020. Available at: https://www.eea.europa.eu/publications/air-quality-in-europe-2020-report

[46] Some of the issues experienced by cities with a port in their vicinity are the negative impacts on the environment, city transport infrastructure and traffic congestion, resulting from the port use which comprises of the operation of ships, port operations and hinterland connection activities. It should be noted that according to the 2017 EEA report 'Aviation and shipping — impacts on Europe's environment' (https://www.eea.europa.eu/publications/term-report-2017), around 55 % to 77 % of the total air pollutant emissions in port regions can come from ships.

- Regarding **road safety**, the decrease in (urban) road casualties has stagnated since 2014, and casualties among vulnerable road users have not decreased at the same rate as other road casualties; almost 23 000 persons still die every year on European roads, among them nearly 9 000 in urban areas[47]. Pedestrians and cyclists have therefore risen as a proportion of total casualties; the elderly are also overrepresented in urban road casualties. Currently, 38% of road fatalities in the EU occur in urban areas, 70% of which are vulnerable road users (pedestrians, cyclists and motorcyclists).

When it comes to **congestion**, it is mainly due to high transport demand and the predominant reliance on private cars (with an average 1.3 person occupancy per trip) and usually happens in and around urban areas. Therefore this problem affects the majority of EU citizens. Observations indicate that, overall, the situation across EU cities has not improved since 2013 and, in many places, has worsened, with very considerable costs to the society[48]. The most common indicator of traffic congestion relates to the difference in average speed between free-flow conditions (usually recorded at night) and those observed at different times of day, converted to an increase in average travel time. As put by the Court of Auditors in their report, '*In the absence of a significant shift to other forms of transport, rising congestion is an indication that urban mobility is deteriorating for road users'*. The Court has confirmed that congestion has worsened in the cities from four Member States it analysed[49] as well as in 25 out of 37 urban nodes.

The problem of congestion is closely linked to **accessibility**, understood in this context as the total number of destinations that can be reached within a fixed period of time. The goal of more sustainable urban mobility supporting better accessibility and seamless mobility along the TEN-T network, envisaged in 2013, has not fully materialised, with in particular congestion in urban nodes remaining a persistent challenge. Accessibility by car depends, to a large extent, on how urbanised an area is[50]. Accessibility by walking and cycling tend to be the highest in cities with dense road networks, higher densities of population and fewer steep slopes. In virtually all EU cities at least 80 % of the population has easy access to public transport[51]. The Court of Auditors also analysed the issue of accessibility by car and public transport in EU cities and concluded that in seven out of eight analysed cities, *it generally remains more time-efficient to use a private vehicle than public transport.* At the same time, it observed that – largely thanks to EU funding for sustainable urban mobility – *the coverage and accessibility of public transport within cities has been improving.* This concerns, in particular, inner cities where the public transport coverage is at a very high level (for the analysed cities). However, the situation is much worse in peripheral areas, showing that significant parts of the population have sub-optimal coverage by public transport.

Regarding **barrier-free accessibility, i.e. accessibility of transport for persons with disabilities or reduced mobility**[52]**,** there are about 87 million persons with different kinds of

[47] https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/scoreboard_2020.pdf

[48] Urban congestion costs are estimated to account for EUR 180 billion per year in terms of delay costs and about EUR 32 billion per year in terms of deadweight loss at EU-27 level. The delay cost gives a value of the travel time lost relative to a free-flow situation. The deadweight loss costs is the part of the delay costs which is regarded as a proper basis for transport pricing. Source: DG MOVE Study 'Sustainable Transport Infrastructure Charging and Internalisation of Transport Externalities' (June 2019) based on: CE Delft (2019), 'Handbook on the External Costs of Transport. Version 2019'. https://op.europa.eu/en/publication-detail/-/publication/9781f65f-8448-11ea-bf12-01aa75ed71a1.

[49] Leipzig, Hamburg, Naples, Palermo, Warsaw, Łódź, Madrid and Barcelona. For example, in the last city the accessibility within 30 minutes driving time during rush hours dropped from 620 km2 in 2012 to 389 km2 in 2019.

[50] European Commission (2019), DG REGIO Working Paper – 'Road Transport Performance in Europe, Introducing a New Accessibility Framework'. Available at: https://ec.europa.eu/regional_policy/en/information/publications/working-papers/2019/road-transport-performance-in-europe.

[51] European Commission (20120), DG REGIO Working Paper – How Many People Can You Reach By Public Transport, Bicycle Or On Foot In European Cities? Measuring urban accessibility for low-carbon modes. Available at: https://ec.europa.eu/regional_policy/sources/docgener/work/012020_low_carbon_urban.pdf

[52] Understood as the possibility of these persons to use transport on an equal basis with other users.

disabilities in the EU(27)[53]. With ageing societies (and women in particular), this number is expected to grow, affecting future mobility patterns. While EU passenger rights legislation grants persons with disabilities or reduced mobility the right to transport, transport infrastructure and rolling stock are still widely inaccessible, notably in rural or remote areas. The European Accessibility Act, adopted in April 2019[54], provides for accessibility requirements improving access to transport for persons with disabilities.

The **challenging situation in rural, peripheral and remote areas** is linked to the issue of **availability** of transport. The Eurobarometer on Mobility and Transport[55] shows that the less urbanised the respondent's environment is, the more likely they are to say there is no alternative to taking the car: 46% who live in rural villages say this, compared to 25% living in large towns. The private car dependency coupled with diminishing or lacking public transport options result in reduced connectivity, including to nearby cities, especially challenging for the impoverished groups. A study focusing on smart transport services in rural areas[56] concluded the predominant problem is the absence of specific policies for rural transport coupled with very few obligations to provide rural mobility services. This issue has also negative repercussion on urban areas, as the increased inflow of private motorised vehicles from outside contributes to the severity of congestion, poorer air quality and more road crashes.

Affordability of transport remains an important issue. Consumer prices for the operation of private transport equipment and for public transport services have increased at a faster pace between 2005 and 2018 than overall consumer price inflation while the share of transport in final household expenditure on consumption (13%) has remained in this period mostly unchanged. The European Pillar of Social Rights, proclaimed by the EU institutions in November 2017[57], places transport among the essential services to which everyone has the right to access (Principle 20): 'Support for access to such services shall be available for those in need.' At-risk groups for transport poverty include households with low incomes, women, the unemployed, ethnic minority members, and households with children.

Finally, in June 2019 Commission services revised their calculations of the societal and environmental impact of transport[58]. The total **external environmental costs of transport** (linked to greenhouse gas emissions, local air pollution, noise, energy production, habitat damage), as well as the costs of congestion and crashes add up to almost €1 trillion annually within the EU, with the urban share estimated to be at least 50%. Road transport causes more than 80% of such external costs (approximately € 620 billion caused by passengers and € 200 billion by freight), including road crash costs (some € 280 billion), congestion costs (some € 270 billion) and environmental costs linked to greenhouse gas emissions, local air pollution, noise, energy production and habitat damage[59] (some € 270 billion). This is a very substantial increase in relation to calculations included in the 2013 Impact Assessment, where the total

[53] http://www.edf-feph.org/newsroom/news/how-many-persons-disabilities-live-eu#overlay-context=about-us

[54] Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0882

[55] Special Eurobarometer 495
https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/SPECIAL/surveyKy/2226

[56] https://ruralsharedmobility.eu

[57] https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

[58] DG MOVE Study 'Sustainable Transport Infrastructure Charging and Internalisation of Transport Externalities' (June 2019) based on: CE Delft (2019), 'Handbook on the External Costs of Transport. Version 2019'.
https://op.europa.eu/en/publication-detail/-/publication/9781f65f-8448-11ea-bf12-01aa75ed71a1;
https://ec.europa.eu/transport/themes/sustainable/internalisation-transport-external-costs_en

[59] Air pollution and habitat damage costs include the impact on biodiversity.

external costs of transport were estimated at € 420 billion annually, with the urban share estimated at € 230 billion.

The trends above are coherent with recent Eurostat findings[60] from a pilot project covering 10 Member States which show that urban trips (trips of less than 100 km within the same urban area) represent a substantial proportion of daily short-distance mobility (less than 300 km) and that the private car is the dominant transport mode.

3. IMPLEMENTATION / STATE OF PLAY OF THE UMP MEASURES

3.1. Developments after 2013

In the last few years, we have witnessed important **societal, scientific and technological developments** with direct and indirect impact on urban mobility, such as:

- A further increase in economic and political importance of cities and urbanised areas coupled with migration (to the EU and into cities) and rising importance of social inclusion[61];
- Mounting scientific evidence on accelerating tempo of climate change (increasingly caused by the high and growing share of transport emissions (25% of total) and of road transport in particular (20%)) and related (new or revised) EU-level objectives and initiatives on decarbonisation, with direct and important influence on cities and their transport systems; urban mobility is responsible for about 23% of EU's greenhouse gas emissions from transport.[62]
- Disruptive changes and innovations in transport and mobility of both a technological nature (digitalisation, automation, "Mobility as a Service", new propulsion systems etc.)[63] and of a societal nature (increasing popularity of shared and active[64] mobility, greater orientation towards "quality of life" issues, raising awareness of negative consequences of reliance on private cars[65] and related insufficient levels of physical activity[66], rise of e-commerce, etc.).;
- Increased awareness of interplay between mobility choices, air quality and health, and of negative impact of poor air quality on human health, in the context of continued non-compliance with EU air quality standards in the majority of EU Member States and in the wake of the vehicle emissions scandal of 2015, also known as *Dieselgate*[67]. Despite improvements over the last decade, the large majority of the urban population in the EU

[60] Eurostat, Passenger mobility statistics, 2020 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Passenger_mobility_statistics#Mobility_data_for_ten_Member_States_with_different_characteristics

[61] Eurostat regional yearbook — 2020 edition. Available at: https://ec.europa.eu/eurostat/documents/3217494/11348978/KS-HA-20-001-EN-N.pdf/f1ac43ea-cb38-3ffb-ce1f-f0255876b670

[62] Estimates based on the PRIMES-TREMOVE model developed by ICCS- E3M-Lab.

[63] Related to this: new entrants (often from outside the traditional transport sector) that offer mobility services and new types of vehicles.

[64] WHO's Health Economic Assessment Tool (HEAT; available at: https://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/activities/guidance-and-tools/health-economic-assessment-tool-heat-for-cycling-and-walking) estimates the value of reduced mortality that results from regular walking or cycling and should be part of comprehensive cost–benefit analyses of transport interventions or infrastructure projects, in particular at urban level.

[65] Transport, Environment and Health, WHO Regional Publications, Europe Series, No 89. Available at: https://www.euro.who.int/__data/assets/pdf_file/0003/87573/E72015.pdf 332.

[66] Over-reliance on individual cars, in particular in urban areas, is linked with insufficient levels of regular physical activity for adults and children, and related health problems, including premature deaths. Being physically inactive is associated with many non-communicable diseases, such as cancer, cardiovascular diseases, overweight/obesity, dementia, type 2 diabetes and stress and anxiety. In order to avoid major negative health consequences, WHO recommends for adults at least 30 minutes a day of moderate physical activity, such as walking or cycling: https://www.who.int/news-room/fact-sheets/detail/physical-activity

[67] Illegal manipulation of the level of vehicles' emissions by car manufacturers unveiled in 2015

continues to be exposed to pollutant concentrations above the levels of WHO recommendations, and over 400 000 premature deaths are attributed to air pollution in the EU per year[68]. Road transport (mostly due to individual cars) contributes a significant share to it, in particular when it comes to nitrogen oxides (NOx), where road transport is the sector with the highest contribution (39%)[69] what is especially problematic in cities as the most densely populated areas[70];

- New data on external costs of transport (totalling to almost EUR 1 trillion/year in the EU, with the urban share estimated to be at least 50%) demonstrating increasingly impact of the current model, with a heavy negative toll on EU economy, human health and the environment, in particular in urban areas;[71].
- Growing evidence that vulnerable road users (particularly pedestrians and cyclists[72]) were forming a larger part of urban road safety casualties and the number of road deaths in urban areas is not declining at the same pace as on other type of roads[73]; currently, 38% of road fatalities in the EU occur in urban areas, 70% of which are vulnerable road users[74].
- Changing employment conditions such as new forms of work (notably people working for online platforms), increased use of teleworking; intra- and cross-border mobility of workers as well as increased students exchanges.

Such societal, scientific and technological developments are also reflected in the CIVITAS Advisory Group Policy Paper of 2020 addressed to the Commission that identified eight key game changers[75] already affecting (or to affect soon) urban mobility: (1) electrification, (2) increased automation and use of C-ITS[76], (3) growth of data economy, (4) new business concepts for freight and passenger transport, (5) shared mobility, (6) growth of active mobility, (7) changing mind-sets and behavioural patterns, and (8) integrated space management.

When it comes to **regulatory and political developments**, there has been a number of EU legal acts adopted in 2013 and afterwards which address policy areas that are directly or indirectly linked to urban mobility. Annex 5 summarises how the following acts are linked with the UMP:

- the TEN-T Regulation[77] and its associated funding instrument the Connecting Europe Facility[78];

[68] European Environment Agency, Air Quality in Europe – 2020 report. Available at: https://www.eea.europa.eu/publications/air-quality-in-europe-2020-report

[69] idem

[70] Source: European Environment Agency. 95% of the EU urban population remain exposed to pollutant concentrations above WHO air quality guidelines and majority of EU Member States in breach of the Union air quality legislation.

[71] DG MOVE Study 'Sustainable Transport Infrastructure Charging and Internalisation of Transport Externalities' (June 2019) based on: CE Delft (2019), 'Handbook on the External Costs of Transport. Version 2019'. https://op.europa.eu/en/publication-detail/-/publication/9781f65f-8448-11ea-bf12-01aa75ed71a1.

[72] https://etsc.eu/walking-and-cycling-data/

[73] https://etsc.eu/urban-road-safety/

[74] Source: CARE database. Available at: https://ec.europa.eu/transport/road_safety/specialist/statistics_en

[75] https://civitas.eu/document/civitas-policy-paper-gamechangers-advisory-group. The CIVITAS SATELLITE Advisory Group defines (urban mobility related) game changers as "recent or upcoming developments that change the existing mobility system (i.e. the way mobility is organised, provided, and used) in a significant and often disruptive way." A game changer is the result of complex interactions between changes in the realms of technology, society, businesses, economics, and policy.

[76] Cooperative Intelligent Transport Systems that allow road users (vehicles) and traffic managers to share information and use it to coordinate their actions, enabled by digital connectivity between vehicles and between vehicles and transport infrastructure.

[77] Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU. Available at: http://publications.europa.eu/resource/cellar/f277232a-699e-11e3-8e4e-01aa75ed71a1.0006.01/DOC_1

[78] Available at: https://ec.europa.eu/inea/connecting-europe-facility/cef-transport

- The Clean Air for All[79] communication in 2018;
- the revised Clean Vehicles Directive[80];
- the Energy Efficiency Directive[81];
- the Alternative Fuels Infrastructure Directive[82];
- Europe on the Move packages (I[83], II[84] and III[85]).

In addition, some significant political developments have taken place since 2013, including the **Urban Agenda for the EU**[86], adopted in 2016 and based upon the premises of the Europe 2020 Strategy. It placed cities and the new approach to governance at the forefront of EU policy design and implementation and is structured around (initially) 12 priority themes and Partnerships, with urban mobility being one of them. It resulted in the Action Plan of the Partnership for Urban Mobility[87].

The more stringent **CO2 emission performance standards** for new passenger cars and new vans for 2025 and 2030, adopted in 2019[88] as well improved testing procedures on emissions standards within the framework of Euro 6 ('**Real Driving Emissions**')[89], are also of high relevance to the identified challenges affecting urban mobility. As of 1 September 2017, new car models have to pass new and more reliable emissions tests in real driving conditions as well as an improved laboratory test before they can be driven on European roads. From 2021, the EU fleet-wide average emission target for new cars will be 95 g CO2/km, which corresponds to a fuel consumption of around 4.1 l/100 km of petrol or 3.6 l/100 km of diesel.

Finally, the **European Green Deal**[90] **(EGD)** presented in December 2019, is the new EU growth strategy through climate neutrality and sustainable economy. It includes ambitious and specific objectives of high relevance for urban transport, such as to 'transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy

[79] European Commission (2018). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A Europe that protects: Clean air for all. COM(2018) 330. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0330&from=en

[80] Directive (EU) 2019/1161 of The European Parliament and of the Council of 20 June 2019 amending Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles. Available at: https://eur-lex.europa.eu/eli/dir/2019/1161/oj

[81] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32012L0027

[82] Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure. Available at: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32014L0094

[83] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe on the Move; An agenda for a socially fair transition towards clean, competitive and connected mobility for all. COM(2017) 283. Available at: https://ec.europa.eu/transparency/regdoc/?fuseaction=list&coteId=1&year=2017&number=283&version=F&language=en

[84] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Delivering on low-emission mobility A European Union that protects the planet, empowers its consumers and defends its industry and workers. COM(2017) 675. Available at: https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-675-F1-EN-MAIN-PART-1.PDF

[85] EC Press release (2018). Europe on the Move: Commission completes its agenda for safe, clean and connected mobility. Available at: https://ec.europa.eu/transport/modes/road/news/2018-05-17-europe-on-the-move-3_en

[86] European Commission website. Urban Agenda for the EU. Available at: https://ec.europa.eu/futurium/en/node/1829

[87] Urban Agenda for the EU (2018). Partnership for Urban Mobility; Final Action Plan. Available at: https://ec.europa.eu/futurium/en/system/files/ged/2018-11-14_pum_final_action_plan.pdf

[88] Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0631

[89] https://ec.europa.eu/growth/content/new-and-improved-car-emissions-tests-become-mandatory-1-september_en

[90] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal. COM(2019) 640. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN

where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use'. It also states that "transport should become drastically less polluting, especially in cities. A combination of measures should address emissions, urban congestion, and improved public transport. Achieving sustainable transport means putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives to their current mobility habits."

The **2030 Climate Target Plan**[91], adopted in September 2020, delivers on the European Green Deal commitment and proposes to raise the EU's ambition on reducing greenhouse gas emissions to at least 55% below 1990 levels by 2030. The European Climate Law Regulation[92], also proposed by the Commission in 2020, aims to enshrine into EU law the 2050 climate-neutrality target.

Regarding innovation-related initiatives, an important development is the publication in September 2020 of **100 climate-neutral cities by 2030 - by and for the citizens**, a report by the Horizon Europe Mission board for climate-neutral and smart cities[93]. It considers an "efficient mobility for all, clean, safe and accessible including carbon free and alternative fuels, promotion of public transport, walking and cycling, smart multi-modal solution such as mobility as a service (MaaS), and automation" a key area in reaching the climate neutrality of cities.

A new **Sustainable and Smart Transport Strategy**[94], adopted on 9 December 2020, aims to operationalise the European Green Deal when it comes to decarbonising transport and lays the foundation for how the EU transport system can achieve its green and digital transformation and become more resilient to future crises. The strategy identifies 82 initiatives in 10 key areas for action ("flagships"). The flagship on '*Making interurban and urban mobility healthy and sustainable*' is one of them and includes a milestone of having at least 100 climate-neutral cities in Europe by 2030. It also states that the Commission will engage with Member States to ensure all cities that are urban nodes on the TEN-T network put in place their own sustainable urban mobility plans by 2030 and that active modes will be promoted with the aim of deploying over 5000km of new bike lanes in the next decade.

Error! Reference source not found. below presents a timeline with all policy developments relevant to the field of urban mobility before adoption of the UMP until first half of 2020.

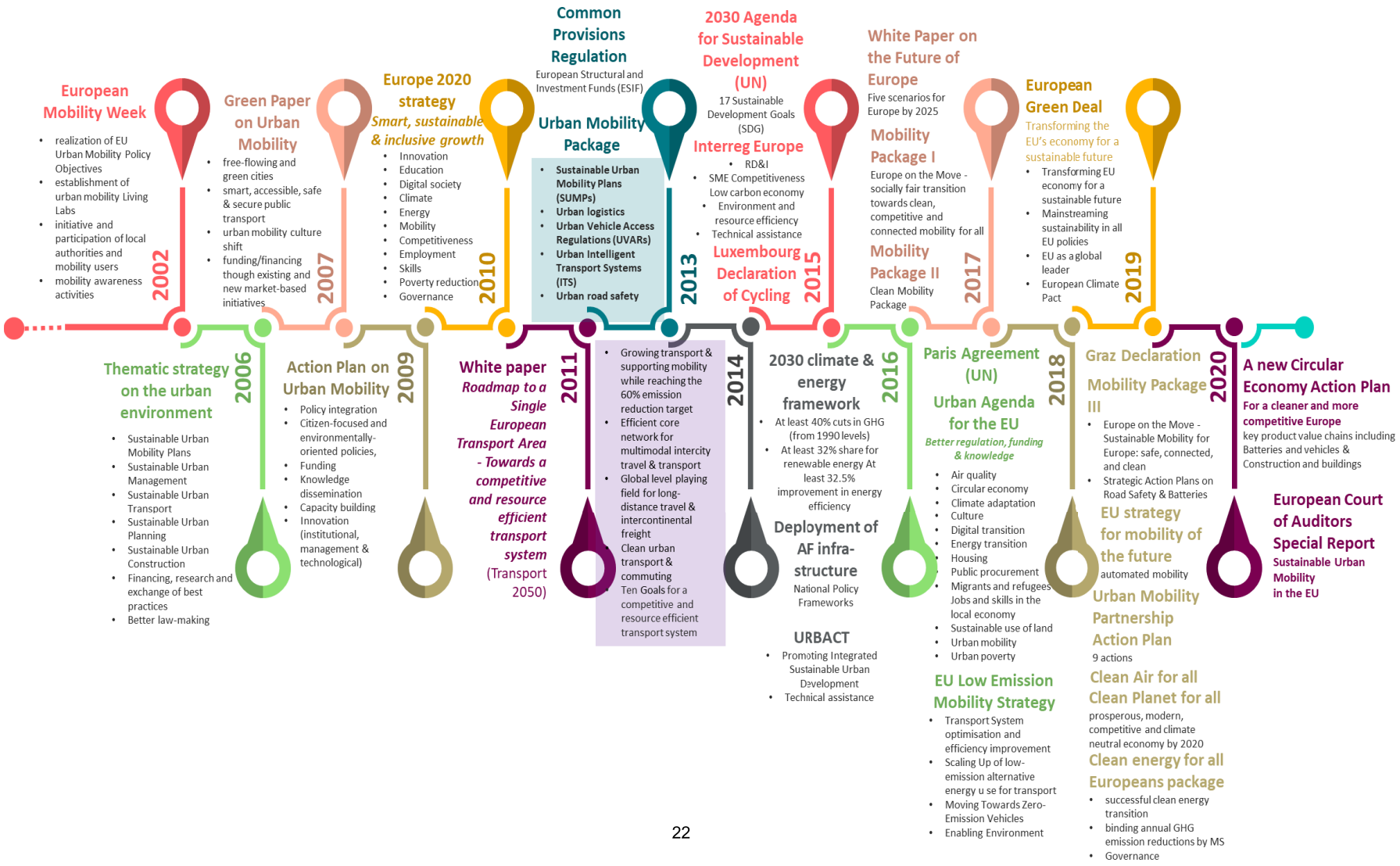
[91] https://ec.europa.eu/clima/policies/eu-climate-action/2030_ctp_en

[92] https://ec.europa.eu/clima/policies/eu-climate-action/law_en

[93] Proposed Mission: 100 Climate-neutral Cities by 2030 – by and for the Citizens. Available at : https://ec.europa.eu/info/publications/100-climate-neutral-cities-2030-and-citizens_en

[94] COM(2020) 789 final. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2329

Figure 1. Timeline of policy developments with relevance to urban mobility



3.2. Implementation of the EU-level measures

All measures foreseen have been implemented to a significant degree, mostly through enabling a framework for discussion and exchanges, the publication of guidance materials or reports and the adoption of specific legislation.

In order to better coordinate public and private sector interventions under the four pillars identified in the UMP, a number of **guidance documents and studies** supporting local authorities and stakeholders were issued. These include:

- a study on urban logistics[95] and a dedicated SUMP topic guide on urban logistics[96];
- a study on UVARs[97], a dedicated SUMP topic guide on UVARs[98] (in addition, the Urban Access Regulations website[99] was established);
- good practice guidelines on safer roads[100] and a dedicated SUMP topic guide on urban road safety[101];
- a topic guide on the role of ITS in sustainable urban mobility planning[102].

The above was supplemented by **legislation** in some of the fields. Under the ITS Directive, a Commission Delegated Regulation[103] on the provision of EU-wide real-time traffic information services was adopted and the Urban ITS standardisation mandate M/546[104] was launched and is currently ongoing. To facilitate the procurement of clean vehicles (including for logistics), the existing legislation on the promotion of clean and energy-efficient road transport vehicles was revised in 2019[105].

Support for UMP across the EU was strengthened by **sharing experience**, **showcasing best practice, and fostering cooperation**. In particular, the website of ELTIS – the EU urban mobility observatory[106], was revamped to include the Mobility Plans section, which serves as a single point of reference for SUMPs, including the European Platform on Sustainable Urban Mobility Plans[107]. The Commission set up the Expert Group on Urban Mobility (EGUM)[108],

[95] Collection of EC reports (2018): Study on urban logistics. Available at: https://ec.europa.eu/transport/themes/urban/studies/study-urban-logistics-integrated-perspective_da

[96] ELTIS (2019): Sustainable Urban Logistics Planning Available. Available at: https://www.eltis.org/sites/default/files/sustainable_urban_logistics_planning.pdf

[97] EC report (2017): Study on Urban Vehicle Access Regulations. Available at: https://ec.europa.eu/transport/sites/transport/files/uvar_final_report_august_28.pdf

[98] ELTIS (2019): UVAR and SUMPs; Regulating vehicle access to cities as part of integrated mobility policies. Available at: https://www.eltis.org/sites/default/files/uvar_brochure_2019-09-26_digital_version_v2.pdf

[99] https://urbanaccessregulations.eu/

[100] EC Good Practice Guidelines (2017): Safer roads for all. Available at: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/safer_roads4all.pdf

[101] ELTIS Topic Guide (2019): Urban road safety and active travel in Sustainable Urban Mobility Planning. Available at: https://www.eltis.org/sites/default/files/urban_road_safety_and_active_travel_in_sumps.pdf

[102] https://www.eltis.org/sites/default/files/the_role_of_intelligent_transport_systems_its_in_sumps.pdf

[103] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32015R0962

[104] https://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.detail&id=568

[105] https://eur-lex.europa.eu/eli/dir/2019/1161/oj

[106] https://www.eltis.org/ The name stands for European Local Transport Information Service.

[107] https://www.eltis.org/mobility-plans/european-platform

[108] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3165&NewSearch=1&NewSearch=1 EGUM meets 2-3 times a year, with first meeting held on 28 October 2014.

composed of Member States representatives. A reinvigorated CIVITAS 2020[109] Initiative was launched as well as the European Innovation Partnership on Smart Cities and Communities[110]. Since 2014, the annual CIVITAS Forum Conference and European Conference on Sustainable Urban Mobility Plans took place[111], gathering several hundred policymakers, local authorities, academics, NGOs, urban transport practitioners and urban planners. The European exchange and learning programme URBACT III[112] is currently ongoing with an increased budget compared to URBACT II. The Sustainable Urban Mobility Indicators project with a benchmarking tool was finalised and is available online[113].

The **EU funding** available for urban mobility (including ITS and cycling/walking) through the European structural and investment (ESI) funds has increased from €11.2 billion in the 2007-2013 programme period to €16.3 billion for 2014- 2020[114], and CEF has provided EUR 214 million for urban nodes since 2014. Horizon 2020 funding in the area of smart, green and integrated transport increased from €55.8 billion in period 2007-2013 to €77 billion in 2014-2020. Besides funding urban transport projects, national, regional and local authorities have received support to develop and implement SUMPs.

Regarding the **international dimension**, the 'Mobilise Your City'[115] partnership supports, inter alia, the development of SUMPs worldwide and has 60 partner cities in 32, mostly developing, countries.

3.3. Implementation of UMP measures by Member States

The analysis of the implementation of UMP measures by Member States has been more challenging and based on limited data. While some Member States collect and publish detailed information, this is not consistent across all Member States. Therefore, to avoid introducing a bias towards the Member States that have well documented information, EU-level sources were used to ensure a uniform approach. A summary per category of measures is provided below.

3.3.1. Urban mobility approaches across all EU Member States

The assessment of national urban mobility approaches covers the existence of national urban mobility plans that are in place in the form of guidance or national laws, and other measures intended to facilitate the development of SUMPs at the local or regional levels.[116].

The majority of Member States have a relevant national plan that included provisions for the development of SUMPs in place[117] but six of them[118] were identified as having no clear

[109] https://civitas.eu/ Since its inauguration in 2002, the CIVITAS Initiative has tested and implemented over 800 measures and urban transport solutions as part of demonstration projects in more than 80 living lab cities across Europe.

[110] https://eu-smartcities.eu

[111] In 2020, the first EU Urban Mobility Days, combining CIVITAS Forum and SUMP Conferences, took place in a virtual format (http://www.eumd.org)

[112] https://urbact.eu/

[113] https://ec.europa.eu/transport/themes/urban/urban_mobility/sumi_en

[114] https://op.europa.eu/webpub/eca/special-reports/urban-mobility-6-2020/en/

[115] https://mobiliseyourcity.net/

[116] This includes three types of 'tools' aimed to facilitate the development and implementation of SUMPs at the local or regional levels, namely technical, national guidance or laws and financing. 1. Technical tools available for municipalities, cities or regions to implement an urban mobility plan. 2. Policy-based and legal tools: the availability of guidance and planning documents, as well as the presence of a legal framework, law or decree for example, that describe urban mobility planning. 3. Financial tool: support from a higher-level authority to local authorities for the implementation of an urban mobility plan or for other urban mobility initiatives.

[117] Example of Sweden, one of the 'frontrunner' Member State in that regard: https://www.eltis.org/mobility-plans/member-state/sweden

measure including provisions for the development of SUMPs, while one Member State (Cyprus) was in the process of developing a national urban mobility plan. It is important to note that the characteristics of these plans vary significantly across Member States, with some Member States having adopted legislation to enforce the implementation of SUMPs at the municipal level[119], while others have opted for a softer form of governance through guidelines and targeted support for the development of SUMPs.

There are significant differences between the Member States that only provided administrative support – such as translation of the EU level guidelines into their respective languages[120] –compared to more targeted support. This included consultation and educational tools, municipal-level coaching by quality advisors, national and local-level promotion activities and methodological guidance.

In addition to the legal and policy tools, financial instruments or tools were found in almost all Member States; however the use of national and EU-level funding varies between Member States and internally between local and national levels.

It should be noted that ELTIS – the urban mobility observatory includes an overview of Member State profiles regarding SUMPs[121] as well as a dedicated SUMP practitioner briefing on SUMP national support frameworks[122].

3.3.2. Implementation of Sustainable Urban Mobility Plans (SUMPs)

The degree of implementation has been assessed based on the number and characteristics of the SUMPs that are publicly available through the ELTIS database[123] as well as on the results of relevant EU-funded projects[124]. It should be noted that there are a number of cities with transport plans that are not officially called "SUMPs" but clearly have a number of SUMPs characteristics, and these have also been taken these into account wherever possible.

The approach used was to review the plans that were available per Member State on the ELTIS database and assess to what degree the principles of UMP pillars were incorporated into each plan.

Overall, the number of adopted SUMPs since the implementation of the UMP has grown from 800 in 2013 to 1 028 in 2020 and, in the second half of 2020, 122 SUMPs are in development. The Member States that have developed the largest number of SUMPs in this period are Belgium, France, Italy, Romania, Slovenia, Spain and Sweden. This data was, for the most part, correlated with the findings from the four case studies of the evaluation support study that covered Belgium, Bulgaria, Sweden and Portugal. Both sets of data reaffirm that despite the growing number of SUMPs, many EU cities – in particular the smaller ones – do not yet have a fully developed SUMP[125]. It should be noted, nevertheless, that the **SUMP City Database on Eltis includes over 550 towns and cities with a population of over 100 000**

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[118] Czech Republic, Croatia, Lithuania, Latvia, Slovakia and Romania

[119] Netherlands, Portugal, the United Kingdom and some regions of Spain and Belgium.

[120] Bulgaria, Croatia, Cyprus, Estonia, Latvia and Poland

[121] https://www.eltis.org/mobility-plans/member-state-profiles

[122] SUMP practitioner briefing *National support frameworks for Sustainable Urban Mobility Planning: National SUMP Supporting Programmes*. Available at: https://www.eltis.org/sites/default/files/national_support_frameworks_for_sustainable_urban_mobility_planning.pdf

[123] https://www.eltis.org/mobility-plans/city-database

[124] Such as CIVITAS SUMPs-Up (https://sumps-up.eu).

[125] Survey conducted by CIVITAS showed that 37% of the 328 surveyed cities has a plan that qualified as SUMPs.

inhabitants[126], indicating that an overwhelming majority of medium and bigger cities in the EU have a SUMP (or another transport plan) in place.

3.3.3. Uptake of EU support for urban mobility

This was assessed on the basis of the extent to which cities have participated in EU-level urban mobility initiatives and fora (such as URBACT, CIVITAS projects and the CIVITAS Forum), as well as have used the EU funding for urban mobility. To compare the information between Member States, the uptake of EU support was assessed on the number of cities participating in European urban mobility projects weighted against the number of inhabitants in each Member State.

The analysis has shown that cities from every EU country have benefitted, with Greece, Slovenia, Lithuania, Portugal, Cyprus, Denmark and Croatia being the Member States with the biggest number of cities receiving the support.

3.3.4. Urban vehicle access regulations

The analysis of this pillar of the UMP was based on the presence of a national programme to support the implementation of UVAR, inclusion of UVAR measures in SUMPs in respective cities and on the number of different UVAR types implemented. These types are: low emission zones (LEZs), urban road tolls (URT), pollution emergency scheme (PES), and other urban access regulations (UARs) – for example, limited traffic zones, limitations for heavier vehicles/lorries, 'superblocks' and others[127].

[126] Data from ELTIS extracted on 30/11/2020

[127] They are described in detail on the urban access regulations website available at: https://urbanaccessregulations.eu/

Fewer than half the Member States[128] have in place a national plan or framework to support the implementation of UVAR schemes.

Regarding the number of UVAR schemes, two countries – Italy and Germany – are substantially more active in this field. Italy has over 200 LEZs in place and has also implemented many schemes in the remaining categories. Similarly, Germany has implemented around 100 schemes ranging over the four different categories. On the other hand, some countries don't have a particularly high number of UVAR schemes, however they might affect significantly the situation in the whole country; this is the case of Belgium, with LEZs in place in Brussels, Antwerp and Ghent. It should be noted that a number of Member States noted a marked increase in the number of UVAR schemes after the implementation of the UMP in 2013: Austria, Belgium, Czechia, Spain, Finland, France, the Netherlands, Poland and the UK.

In addition, while most of the more active Member States have a high proportion of LEZs, PES and UARs such as restrictions for vehicles of particular weights, only a small number of cities have put in places urban road tolls schemes (congestion charging): Milan and Palermo (Italy), Goteborg and Stockholm (Sweden) and Malta (Valetta).

At a more general level, it is worth noting that a very small number of cities have implemented UVAR measures in the countries of Central and Eastern Europe.

3.3.5. Urban road safety

Improving road safety in urban areas is a key issue for all Member States and there have been numerous initiatives and measures to reduce the number of serious injuries and road fatalities already prior to the implementation of the UMP. In the EU-27, there were more than 8 600 lives lost on urban roads in 2018, representing 38% of all road fatalities.

To analyse the state of implementation, the number of urban road fatalities per number of inhabitants in the latest reported year and the availability of a national plan to reduce the number of urban road fatalities, were taken into account[129].

Overall, all of the Member States have a national road safety plan in place and EU-wide the number of fatalities in urban areas fell by 21% between 2010 and 2018. However, there has been a stagnation observed in the last few years, in line with the overall trend in road death statistics. Over the period 2010-2018, the number of cyclists killed on urban roads actually increased by 6%.[130]

While the average number of urban road deaths in the EU is 21 per million population, the rate ranges from 8 in Sweden to 61 in Romania (excluding small countries for whom the figures are relatively low and tend to fluctuate from year to year).

EU-wide, around 70% of fatalities in urban areas involve vulnerable road users and it was observed that the number of urban road fatalities is generally higher in the Member States in the east and south of Europe. This is therefore a key area of focus when considering measures to tackle road safety. In this regard, two European capitals, Helsinki and Oslo, achieved the

[128] Austria, Bulgaria, Czechia, France, Greece, Italy, Sweden, the Netherlands, Denmark, Germany, Poland and Finland

[129] However, as most of the Member States have a national approach that had already been put into action prior to the implementation of the UMP, this category is of less importance.

[130] https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/scoreboard_2020.pdf

milestone of zero pedestrian and cyclist deaths in 2019. Both Oslo and Helsinki cite speed reductions as essential to progress, as well as the work done to encourage cycling. Enforcement remains crucial in both cities.

3.3.6. Urban Intelligent Transport Systems (ITS)

Urban Intelligent Transport Systems (ITS) refer to systems that help to optimise the use of existing infrastructure through a variety of means, such as traffic signals, journey planners, smart ticketing or cooperative systems (including vehicle-to-vehicle and vehicle-to-infrastructure communication systems). They foster the coordinated management of access restriction schemes, smooth the operation of city logistics and enhance road safety measures.

To assess the state of implementation of urban ITS across Member States the following data was used:

1. The presence of a national approach or plan which includes provisions to ensure the implementation of the UMP urban ITS measures;
2. The relative number of reported good practices;
3. The share of SUMPs in each Member State that includes provisions for the implementation urban ITS.

Overall, a majority (19) of Member States were found to have a national plan in place. Five of them (France, Greece, Italy, Portugal and Ireland) have well-established and integrated forms of urban ITS that incorporated the related measures set out in the UMP. In addition, they reported several cases of good practice and include ITS measures in the majority of SUMPs.

3.3.7. Urban logistics

Urban logistics may be defined as meaning the movement of goods, equipment and waste into, out, from, within or through an urban area[131]. To assess the state of implementation of urban logistics approach across Member States, similar data as above – having a national plan in place, number of reported good practice examples and the share of SUMPs with urban logistics provisions – was taken into account.

The analysis shows that almost half (13) Member States have a national scheme to support the implementation of urban logistics measures, and a majority of Member States have cities that have actively implemented the UMP measures on urban logistics. In particular, this area was also found to be included in the majority of SUMPs in most of the Member States. Three Member States (France, Portugal and Austria)[132] were found to be leading in this field as having relevant and available national support schemes, a high number of good practice examples and a high percentage of SUMPs with provisions for urban logistic measures.

[131] Commission Staff Working Document *A call to action on urban logistics,* SWD(2013) 524 final. Available at: https://ec.europa.eu/transport/sites/transport/files/themes/urban/doc/ump/swd%282013%29524-communication.pdf

[132] For example, urban logistic measures are included in all 10 analysed French SUMPs as part of the support study. Among them, the SUMP for the Paris region provides for e.g. a dedicated urban logistics 'toolbox' and 9 good practices such as a 'Label on night deliveries respecting the residents'. Available at: http://www.pduif.fr.

4. METHOD

4.1. Short description of methodology

The evaluation of the UMP started in November 2018 with the publication of the roadmap and was overseen by an Inter-Service Steering Group (see Annex 1). The evaluation questions were linked to the five criteria defined by the Better Regulation Guidelines and further operationalised into sub-questions with corresponding indicators and judgement criteria[133].

Baseline: The main source used to define the baseline in this evaluation is the 2013 impact assessment. Publicly available data was complemented by PRIMES-TREMOVE transport model projections.

External support study: This evaluation builds in particular on the findings of an external support study, which collected data and provided an analysis of the evidence from the consultation activities and the available literature.

Evidence for the evaluation support study was gathered through a wide combination of data sources: a targeted survey of key stakeholders[134] interviews, a literature and statistical information review, workshops[135] and 4 case studies for Belgium, Bulgaria, Portugal and Sweden. The case studies allow for an in-depth analysis of the implementation of UMP measures in 12 selected cities (3 per Member State). They aim to explore the link between the introduced measures and achieved outcomes, and to assess them, taking into account drivers, barriers and alternative explanations (contribution analysis)[136].

Public Consultation: The Commission organised an online public consultation to support this evaluation. The consultation ran from 11 September 2019 to 4 December 2019. The questionnaire of the public consultation was made available on the Commission's Public Consultation Portal "Have your say"[137] in all EU languages. The survey was answered by a total of 207 respondents, 86 of which were individuals and the rest replying on behalf of an organisation.

A summary of consultation activities can be found in Annex 2.

EGUM: The Expert Group on Urban Mobility is composed of representatives of all EU Member States and Norway and was set up in 2014 as a result of the UMP. Its main aim is to facilitate the exchange of information and the cooperation on urban mobility issues between Member States and the Commission. The Commission has regularly updated the Group on the progress with the UMP evaluation over the last 2 years. At a dedicated meeting on 3 June 2020, attended by 18 Member States (plus Norway), the emerging results of the draft support evaluation study were presented. It was followed by a discussion, focusing on country fiches and case studies, thus contributing to improving the quality of the study.

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[133] The evaluation question matrix is provided in Annex 3b.

[134] In the case of the online surveys, it was envisaged that data would be gathered and analysed from 3 targeted surveys addressed to national authorities; local and regional authorities; and civil society, networks and private sector actors. Due to low response rates and a subsequent lack of useful information therein, the decision was made to only analyse the survey targeting national authorities. Furthermore, additional targeted interviews were conducted to compensate for the low response rate from the surveys.

[135] A workshop for national representatives of Member States Expert Group on Urban Mobility (EGUM) and a stakeholder workshop held on 3 June 2020

[136] In this sense, the topical case studies may be regarded as "performances stories" that analyse how the Urban Mobility Package has "performed" in the national and local context, building on quantitative and qualitative data collected as part of the support study.

[137] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1995-Urban-Mobility-in-the-EU/public-consultation

CIVITAS Advisory Groups: two Advisory Groups were set up in 2018– on the Future of Urban Mobility Policy and on Game Changers in Urban Mobility[138]. They were composed by experts and academics in the field and delivered two policy notes[139] which supported the findings of the evaluation.

Court of Auditors report on the EU urban mobility policy and funding[140]: published on 3 March 2020, the report examines whether EU legislative and financing support have helped to make mobility in urban areas more sustainable, and whether cities have made progress since the Urban Mobility Package. The report provides an analysis of public transport, pollution and congestion developments in eight cities in four Member States: Hamburg and Leipzig in Germany, Naples and Palermo in Italy, Łódź and Warsaw in Poland, and Barcelona and Madrid in Spain.

In preparing this document, the Commission services also relied on internal data collection.

4.2. Limitations and robustness of findings

The analysis carried out has encountered a number of limitations, in particular the limited availability of comparable data (linked with the problem of lacking systematic urban mobility data collection in the EU), low number of replies to a part of the consultation and reliance on stakeholder views for some findings, and the existence of other (EU) interventions impacting on the urban mobility field that made it difficult to disentangle the effects of the UMP. Efforts were taken to mitigate these limitations.

One of the persisting challenges was evaluating the real impact of the UMP because of its nature as a non-binding policy instrument which relies on actions by multiple actors and which interacts with other EU measures, including legislative acts, as well with various national and local initiatives. Therefore determining the true effect that the UMP had across each of the four areas (UVARs, urban ITS, urban logistics and urban road safety) remains challenging, and even more so when it comes to attributing UMP impact on higher-level indicators and trends such as CO2 emissions.

The limitations regarding the low number of replies to the surveys conducted in the framework of the support study were mitigated to considerable extent by additional consultation activities (public consultation and interviews). However, while some of the information for the indicators (collected during the support study) was easily available, the availability of well-documented and consistent data was limited. In most instances there were no indicators available and where they were available, the information did not have the correct geographical scope (with a country instead of city/urban area focus) or date range as desired[141]. This was exacerbated by the fact that some impacts affecting sustainable urban mobility take longer than the evaluation period to materialise.

The mitigation measure was to rely more on qualitative data and on stakeholder consultation activities[142]. Further limiting factors included the local nature of information, the wide range

[138] https://civitas.eu/document/civitas-policy-paper-gamechangers-advisory-group

[139] Available at: https://civitas.eu/document/civitas-policy-paper-gamechangers-advisory-group

[140] https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=53246

[141] In particular, more recent data (for years 2018-2020) has not been consistently available for all Member States what might have a (limited) impact on the validity of some of the findings

[142] For example, it was possible to gather additional evidence from studies concerning SUMPs, UVARs and urban road safety. Similar studies were not as prevalent for urban logistics; however, some information was available. Concerning urban ITS, the most useful source of information found was linked to the Member State reports of the ITS Directive.

of expert estimates and the large range of other influencing factors. Regarding stakeholder consultations, data collection was hampered by a lack of specific knowledge or awareness of the Urban Mobility Package among a part of interviewees.

Despite all this, and in particular the lack of comparable quantifiable data, the presence and collection of qualitative data has enabled some relevant and valid conclusions to be drawn.

5. ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS

5.1. Relevance

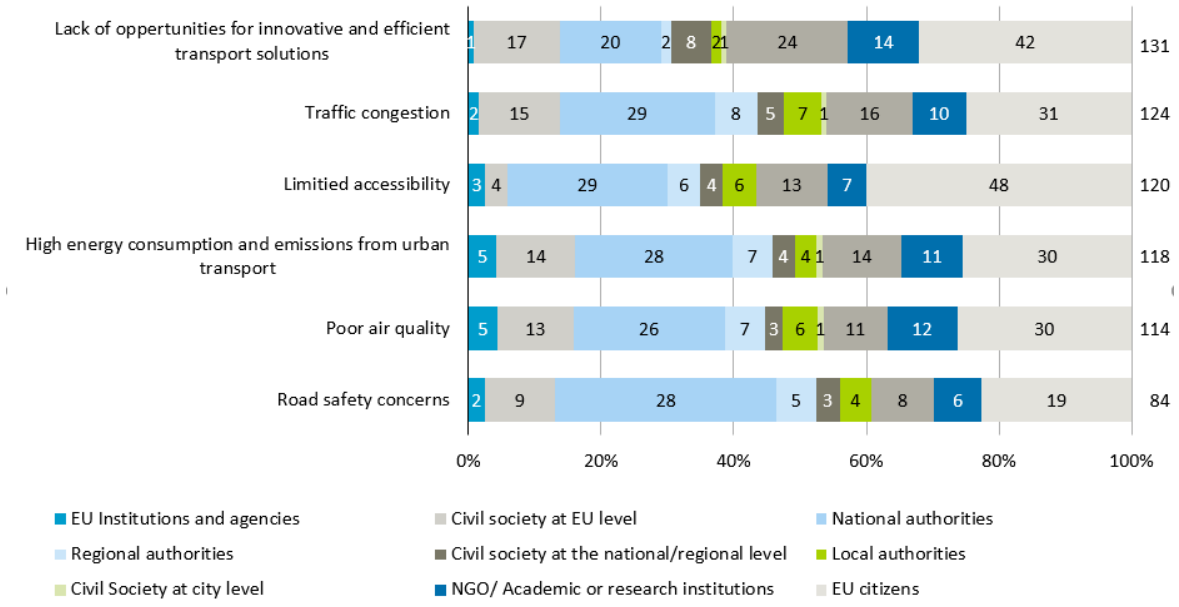
This section discusses the relevance of the UMP, at the level of the objectives and measures, with relation to the problems, needs and challenges of stakeholders and cities, and in light of relevant post-2013 developments.

5.1.1. Relevance of problems identified in the UMP

The main problem originally identified in the UMP – namely that mobility within cities is increasingly inefficient and unsustainable – is still relevant. This applies as well to the main drivers: lack of/insufficiently integrated urban mobility approaches, both in relation to policy making and processes, and the underlying root causes.

This finding is supported by data and observations regarding the related main negative consequences: urban congestion (affecting accessibility and transport performance), deaths and injuries due to road crashes in urban areas, poor air quality, noise and CO2 emissions. This is demonstrated by the key indicators and trends related to developments in the area of urban mobility (presented in Section 2), and confirmed during the stakeholder consultation, with problem drivers and causes assessed as highly relevant or relevant as shown in figure 2 below.

Figure 2: Key problems to be addressed in urban mobility across stakeholders (n=variable)[143]



[143] The graph presents the number of responses given by interviewed stakeholders, the total number of responses from the national authorities and the public consultation. The targeted national authorities' (EGUM) survey uses responses that answered that these problems are relevant to a small (to some), to a large and to a very large extent. Innovative transport was not an option in the EGUM survey.

Source: Combined stakeholder totals from the targeted interviews, targeted survey and public consultation

5.1.2. Relevance of the UMP objectives

As stated in Section 2, the main UMP objective is to reinforce the support to European cities for tackling urban mobility challenges so that they develop along a more sustainable path, in particular by ensuring the uptake of an integrated urban mobility approach across the EU[144]. This would contribute to achieving the wider EU goals for a competitive and resource-efficient European transport system, which would lead to reduction of CO2 and air emissions, congestion and road deaths and injuries.

The analysis and the evidence from the targeted consultation indicate that the objectives were appropriate for meeting the identified needs and are, overall, to large extent relevant. However, some views expressed during the stakeholder consultation as well as recommendations from the CIVITAS Advisory Group on Game Changers as well as more ambitious climate and social objectives included in the European Green Deal outline the need for further support to cities and to better grasp recent (technological, societal, environmental and policy) changes/disruptions.

In particular, a number of stakeholders[145] highlighted the need to **strengthen the focus on social and equality issues**, especially with relation to impoverished groups (that cannot afford available modes of transportation) and persons with disabilities or reduced mobility groups, as well as the redefinition of the concept of quality of life to include different policy priorities, such as liveable cities. In addition, with aging societies and a predominately female older population, the specific needs of women need to be better taken into account in terms of time and purpose of travel, route, travel distance as well as safety considerations.

Equally, the identified 'game changers' call for a more suitable EU framework that would, inter alia, more properly capture the quickly evolving nature of new, shared mobility services, propose more effective incentives for **safe and accessible public and active transport**, and more decisively respond to the climate emergency in relation to local transport. The need to better address the connectivity with rural areas and a regional approach as well as closer alignment with land-use planning in the context of SUMP was also raised[146]. In a similar vein, the importance to better take into account long distance transport networks – in particular railways – as they are important to meeting needs of people living in suburbs and in a wider region, was highlighted[147].

Emerging conclusions from EU-funded project SMARTA[148] seem to confirm the above, indicating that **rural public transport services** (including connections with urban areas) in

[144] Two operational objectives from 2013 Impact Assessment are: 1. To provide EU urban areas with a policy framework encompassing all policy issues necessary to ensure an integrated approach to urban mobility, at the latest by 2020, and

2. To provide EU urban areas with a governance framework encompassing all procedures and processes necessary to ensure an integrated approach to urban mobility, at the latest by 2020.

[145] A need to have an increased focus on social issues and the concept of liveability was noted by 17 out of the 67 interviewees representing regional/local authorities, civil society and private sector actors at EU/national level. In the Public Consultation, 5 out of 207 participants (representing EU citizens (4 out of 5) and public authorities (1 out of 5) noted that there should be equal representation for all citizens, and 5 out of 207 participants (representing EU citizens) answered that there needs to be a greater gender balance in planning decisions. The topic of liveability was also raised more widely by 73 participants (representing all stakeholder groups) in the Public Consultation, where they noted that there is a need to create more accessible infrastructure.

[146] Statement provided in the framework of public consultation by the European Office of the Metropolitan Region FrankfurtRheinMain.

[147] Position papers by CER (Community of European Railways) and České dráhy provided in the framework of public consultation.

[148] SMARTA (smart transport services in rural areas). More information: https://ruralsharedmobility.eu/

Europe are under stress. A combination of factors including austerity measures and demographic change (ageing, immigration and depopulation) leads to absence of a range of services, including mobility. These demographic trends are estimated to continue, with in 2050, only 16 % of the European population living in rural areas compared to the current value of 27%. The lack of qualitative public mobility services has resulted in private car dependency and reduced connectivity, meaning that those without a car have reduced possibilities to participate in society, penalising the impoverished groups and negatively affecting the urban areas by contributing to congestion, air pollution and road crashes. Findings from the SMARTA project also show that EU countries lack dedicated policies to rural mobility with specific national commitments to provide transportation services[149].

Finally, an important finding, based on stakeholders views (in particular local authorities), is the **difference in the problems and related needs between large, medium and small-sized cities, as well between small, concentrated high density cities and widespread, less dense, sprawling conurbations**. Small cities within low-density areas, for example, often do not exhibit the same severity of problems as in dense urban areas (such as air quality, emissions, congestion and urban road safety). On the other hand, the sprawling conurbations and agglomerations with many people commuting from outside often exhibit challenges with proper connectivity, in particular from the nearby rural and per-urban areas. There are some main issues of particular relevance for smaller and less densely populated municipalities (including those surrounding bigger cities and agglomerations) emerging from the interviews:

- *Eligibility and access to funding*: funding is often linked with urban mobility policies that focus heavily on decarbonisation and low emission mobility objectives; while it is recognised that planning should be aligned with those, it appears that not all cities or urban areas have the same needs when it comes to funding[150], and in case of smaller cities in particular, the access to funding was limited due to staffing, know-how and related issues.

- *Guidance for planning and implementation of measures*: the objectives, needs and guidance associated with the urban mobility initiatives are often perceived as more relevant in the context of metropolitan areas and therefore it is less clear to stakeholders from small municipalities what the measures will bring to their cities; thus, guidance and measures specifically created for cities of smaller dimensions and low densities would provide additional support and value.

- *Demand-responsive solutions for public transport[151]:* they are understood as being more suitable to improve supply and demand of public transport in low-density areas in urban and peri-urban environments.

The recent Commission report on the quality of life in the European cities[152] provides interesting data illustrating some of the above differences and needs. Car use clearly declines

[149] SMARTA findings further indicate that (shared) rural mobility schemes can be successfully operated, but the challenge remains to combine all of the necessary elements to ensure a EU comprehensive framework. A general conclusion of the SMARTA project is that rural mobility urgently needs more attention as it is critical to the overall sustainability of rural areas.

[150] One such example (from a city case study) is the city of Beja in Portugal, with a population density of around 90 inh/km2 (2018). Local-level interviewees from Beja mentioned that while there were no evident air quality problems, the local authority utilised existing funding opportunities for the renewal of the municipal fleet with electric cars and buses.

[151] Digitally-enabled solutions for public/collective transport where vehicles do not have a fixed route or timetable but instead change their routes based on particular demand. The vehicles – such as buses, mini-buses or taxis – usually pick-up and drop-off passengers in locations according to their needs.

[152] Report on the Quality of life in European cities, European Commission, 7/10/2020. Available at: https://ec.europa.eu/regional_policy/en/information/publications/reports/2020/report-on-the-quality-of-life-in-european-cities

with city size[153] and in most countries, the capital city has the lowest car use. On the other hand, the usage of public transport increases with city size[154], indicating a negative correlation with car use, and in most countries, the share of public transport use is highest in capital cities.

A **correlation can be also observed between a city size and accessibility**. Analysing at regional level how many people living in a 120-kilometre radius can be reached within a 90-minute drive by car, a working paper from the Commission estimates that within the EU it depends, to large extent, on how urbanised it is. On average, cities outperform rural areas although not all cities perform that well; cities in eastern EU Member States achieve a lower performance, especially the smaller ones[155]. A similar trend is visible also in relation to accessibility by public transport: access to high-frequency departures is highest in cities with at least 1 million inhabitants and considerably lower in cities with fewer than 250 000 inhabitants, although some cities perform much better or worse than their size implies. Walking and cycling perform well in cities with dense road networks, higher densities and fewer steep slopes; cycling accessibility may be lower in case of poor road or safety conditions[156].

Therefore, **for the UMP objectives to remain fully relevant and comprehensive, these new developments and needs should be considered** to address the underlying issues of designing and implementing effective urban strategies.

5.1.3. Relevance of the main pillars of the UMP

5.1.3.1. Relevance of SUMP

The concept of SUMP is the best known element of the UMP, and its role in achieving the objectives of the Package is widely recognised. The **high relevance of SUMP** has been confirmed by public and stakeholder consultation, by the members of the Member States Expert Group on Urban Mobility, by the high demand for SUMP capacity-building programmes among local authorities, as well as by the Court of Auditors. The latter has explicitly included SUMP in both of its recommendations which call the Commission to:

- *carry out an impact assessment and, subject to the positive outcome of this process, propose legislation requiring Member States to collect and submit regularly relevant data on urban mobility and on the adoption of Sustainable Urban Mobility Plans (SUMPs) in all EU urban nodes of the core and comprehensive TEN-T networks, including their surrounding areas.*
- *link EU funding with SUMPs.*

[153] 'While around 50 % of residents say they use a car on a typical day in cities with less than 250 000 inhabitants, the percentage decreases to 46 % in cities of between 500 000 and 1 million inhabitants. It drops further to 43 % in cities of 1 million to 5 million inhabitants, reaching the minimum of 38 % in cities with more than 5 million inhabitants.'

[154] 'While around 38 % of residents claim they use public transport on a typical day in cities with less than 250 000 inhabitants, the percentage increases to 43 % in cities with between 250 000 and 1 million inhabitants. It further increases to 46 % in cities with 1 million to 5 million inhabitants and reaches a maximum of 56 % in cities with more than 5 million inhabitants.'

[155] European Commission (2019), DG REGIO Working Paper – 'Road Transport Performance in Europe, Introducing a New Accessibility Framework'. Available at: https://ec.europa.eu/regional_policy/en/information/publications/working-papers/2019/road-transport-performance-in-europe.

[156] European Commission (20120), DG REGIO Working Paper – How Many People Can You Reach By Public Transport, Bicycle Or On Foot In European Cities? Measuring urban accessibility for low-carbon modes. Available at: https://ec.europa.eu/regional_policy/sources/docgener/work/012020_low_carbon_urban.pdf

In addition, the policy notes of the CIVITAS Advisory Groups confirm the value and relevance of sustainable urban mobility planning in tackling the challenges cities are facing, and include recommendations to further reinforce it.

Finally, the relevance of SUMP was also confirmed by the positive **reception and popularity of the European guidelines**[157] from 2014. In order to better reflect the most recent trends in mobility, technology, and society, and to integrate the rich experience of implementing the SUMP concept since 2013, a major revision was undertaken in 2019. On top of revising the original guidelines (focused on the process of SUMP preparation, consultation, implementation and evaluation), new, dedicated guidance material[158] was published. This additional guidance material includes comprehensive planning recommendations on topics of relevance, such as: linking transport and health in SUMPs; sustainable urban logistics planning; planning for electric road transport in the SUMP context; or supporting and encouraging cycling within a SUMP. The very high demand for this focused and topic-specific practical guidance[159] indicates its high relevance for urban mobility. In addition, the high uptake of two new topic guides published in recent months: *Addressing gender equity and vulnerable groups in SUMPs* and *COVID-19 SUMP Practitioner Briefing*[160] supports the claim from the previous sub-section regarding the need to better capture new developments of relevance for the UMP.

5.1.3.2. Relevance of UVARs, urban logistics, ITS and road safety

The evaluation has found that **UVARs and low emission zones (LEZs)** continue to be important policy tools for a number of cities because they enable them to act on a range of issues already discussed, in particular air quality and congestion. It is important to acknowledge that the Ambient Air Quality Directive has been a driver for Member States and local authorities to consider LEZs. The developments such as the persistent non-compliance with air quality standards, 'dieselgate' and rising awareness of the impact of air quality on human health, seem to even further reinforce the relevance of low emission zones in particular, with increasing number of cities implementing or envisaging implementation of such schemes. It was confirmed also by the stakeholders[161], who further connect those measures to parking policy and public space management. UVARs also have interlinkages with urban ITS, urban road safety (pedestrianisation, traffic management and routing, etc.[162]) and urban logistics (access time, vehicle characteristics, load factors [87,163,164]), as well as citizens' awareness of environmental and decarbonisation policies. On top of it, civil society organisations highlighted in the interviews that UVAR is an area which should be

[157] https://www.eltis.org/mobility-plans/sump-guidelines

[158] 12 'Topic Guides' (https://www.eltis.org/mobility-plans/topic-guides) and 5 'Practitioner' Briefings' (https://www.eltis.org/mobility-plans/practitioner-briefings)

[159] As demonstrated by the data on the number of unique downloads from the ELTIS website since their publication in October 2019, showing for instance that as of 14 October 2020 the topic guide on Mobility as a Service in SUMP was downloaded 2143 times, the guide on Supporting and encouraging cycling in SUMP – 489 times, and the guide on Sustainable urban logistic planning - 269 times.

[160] Downloaded 128 and 267 times respectively as of 14 October 2020

[161] Of those who answered, it was noted by 32 out of 67 interviewees and 119 out of 207 participants in the Public Consultation that air quality was an important issue that needed to be addressed.

[162] European Platform on Sustainable Urban Mobility Plans (2019). Topic Guide; UVAR and SUMPs – Regulating vehicle access to cities as part of integrated mobility policies. Available at: https://www.eltis.org/sites/default/files/uvar_brochure_2019-09-26_digital_version_v2.pdf

[163] Taniguchi, E. and Thompson, R.G. (2014). Introduction. In City Logistics: Mapping the Future, Taniguchi, E. and Thompson, R.G. (Eds). CRC Press.

[164] Navarro Lopez, O. (2018). Urban Vehicle Access Regulations. In Sustainable Freight Transport: Theory, Models, and Case Studies, Zeimpekis, V., Aktas, E., Bourlakis, M. and Minis, I. (Eds), SpringerLink.

strengthened, particularly through political support in order to facilitate their implementation, while private sector actors stressed challenges that reduce LEZs effectiveness[165].

The relevance of the **urban ITS** has been confirmed, with technological developments of recent years further extending both the range and effectiveness of these measures (and thus, indirectly, also their relevance). Increased automation and use of C-ITS[166], growth of data economy and shared mobility are ITS-related 'game changers' as identified by the CIVITAS Advisory Group and whose importance – and relevance – has been rising.

The importance of **road safety** and reduction of injuries and deaths resulting from traffic crashes has been rising over the past years, with local, national and EU authorities raising the ambitions in that regard. This was confirmed, inter alia, by the Valetta Declaration[167] adopted in 2017 by EU Transport Ministers, the Commission's Strategic Action Plan on Road Safety[168] of 2018 and policies of many cities[169], all aiming for 'Vision Zero' when it comes to road fatalities. In addition, it has been explicitly characterised as being very important and relevant by many stakeholders[170], especially with relation to vulnerable road users and new transport modes (e.g. e-scooters, silent electric cars and buses, heavy vehicle traffic through cities, etc.). This was confirmed as well by the findings of the Advisory Group on Game Changers, in particular in its recommendations concerning shared mobility and the growth of active mobility. It is therefore a highly relevant policy area.

The **relevance of the four main pillars of the UMP** was also reinforced by the fact that there is widely known dedicated SUMP guidance covering all of them by 2019[171], and by the stakeholders[172]. Overall, all UMP pillars are considered to be relevant, with more emphasis on the measures related to SUMPs.

It should also be noted that, according to some stakeholders[173], regardless of the relevance of individual UMP measures, the **overall inspiration, motivation to progress and reality check of actions** provided by the UMP, as well as the accumulated experience and expertise from previous programmes and projects, are very relevant and beneficial. It was also stated that in some cases the UMP has been used as an effective lever for change with both decision-makers and the public, resulting in SUMPs entering the political agenda: a number of SUMPs have been developed with the support of national or EU funds.

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[165] This includes policy resistance at the national level, due to a perceived linkage between private business profitability with regards to access and parking.

[166] Cooperative Intelligent Transport Systems

[167] https://data.consilium.europa.eu/doc/document/ST-9994-2017-INIT/en/pdf

[168] https://eur-lex.europa.eu/resource.html?uri=cellar%3A0e8b694e-59b5-11e8-ab41-01aa75ed71a1.0003.02/DOC_2&format=PDF

[169] In particular from Sweden, The Netherlands and the United Kingdom.

[170] 18 out of 67 interviewees and 45 out of 207 participants in the Public Consultation noted that road safety was an important issue that needed to be addressed. It was also noted by 149 out of 207 participants in the Public Consultation that the measure of coordinating public and private sector inventions in the area of urban road safety was highly relevant.

[171] The following guidance is of relevance here: Sustainable Urban Logistics Planning (269 unique downloads from ELTIS website as of 14 October 2020), Integration of Shared Mobility Approaches in Sustainable Urban Mobility Planning (24 downloads), The Role of Intelligent Transport Systems (ITS) in Sustainable Urban Mobility Planning (185 downloads), Mobility As A Service (MAAS) and Sustainable Urban Mobility Planning (2143 downloads), Road Vehicle Automation in sustainable urban mobility planning (44 downloads), Urban Road Safety and Active Travel in Sustainable Urban Mobility Planning (2 downloads), UVAR and SUMPs: Regulating vehicle access to cities as part of integrated mobility policies (12 downloads) and Parking and SUMP (178 downloads).

[172] It was noted by 31 out of 67 interviewees.

[173] It was noted by 14 out of 67 interviewees

5.1.3.3.New and emerging areas to be taken into account

Technological developments during the past decade have been both disruptive and game changing. The transport and mobility sector has been profoundly impacted by changes in innovation with implications for the economy, society, environment and institutions. However, there is another side of innovation that should not be left out, namely institutional innovation (legislation, regulation, governance, business models, etc.).

Over the years, **decarbonisation and climate change** have been progressively and increasingly integrated into policy priorities at European, national and local level. With the Paris Agreement[174] and the United Nations' sustainable development goals[175], the pressure on governments, including at local level, has stimulated significant changes in policies and strategies. This has also been supported by public awareness and societal impetus for individual **lifestyle changes** and active advocacy for sustainable mobility. The increased interest in young generations towards sharing mobility schemes, instead of ownership of vehicles, is a practical example of the **change in mobility and environmental culture**. A number of interviewed stakeholders at the local level[176] confirmed this argument.

From a political and regulatory perspective, **the European Green Deal** (described in more details in Section 3.1) and **the diesel scandal and its aftermath** seem to be particularly relevant[177] as they have triggered important changes impacting also on urban mobility. The first initiative is of key importance as it sets the EU on a new path towards reaching net zero climate emissions by 2050 which assumes a fundamental transport transformation, including at urban level. The objectives of the European Green Deal go beyond the UMP not only in relation to CO2 emissions reduction but also when it comes to decreasing the negative impact of transport on health and the environment while stressing that the transition has to be just and inclusive. The diesel scandal is considered to have put in the public spotlight the issue of vehicles emissions, their link with air quality in urban areas (and with related negative health consequences of exceeding the limit values of air pollutant concentrations), and the urgency to tackle them. It has, finally, changed the relevant regulations, leading, among others, to "real driving" emissions testing.

Therefore, in addition to the four main pillars of UMP, a number of **additional relevant areas** can be put forward for possible future consideration in future urban mobility policies, as supported by many stakeholders[178]. Equally, the Court of Auditors and both CIVITAS Advisory Groups identified fields that either have not yet been sufficiently covered by the UMP and/or which should be better grasped due to rapid technological, societal and political developments and in order to meet the EU-level objective, in particular concerning decarbonisation.

The most salient of those areas are **public transport** and **active mobility.** Public transport-related aspects such as multimodal information systems and smart ticketing were also mentioned as relevant areas. In addition, efficient public transport systems were recognised as a key challenge by respondents in the public consultation.

[174] Available at: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

[175] Available at: https://sdgs.un.org/goals

[176] 8 out of 14 local authorities that were interviewed.

[177] European Court of Auditors (2019). The EU's response to the 'dieselgate' scandal. Briefing Paper. Available at: https://www.eca.europa.eu/lists/ecadocuments/brp_vehicle_emissions/brp_vehicle_emissions_en.pdf

[178] Overall, 42 out of the 67 interviewees provided further detail on other relevant areas that could be included.

Public space reallocation in favour of **active modes** has been raised as an additional area of relevance for urban mobility policy by the stakeholders[179] during the consultation. Its importance and relevance has been, however, greatly increased during the COVID-19 pandemic in 2020, with local authorities taking numerous measures to help people move safely during the lockdown. It included the temporary reallocation of road space to create pop-up bike lanes and enlarged pavements, some of which will become permanent. Section 5.1.3.4. tackles this in more detail.

The following additional issues were also identified:

- Infrastructure development (including for electric vehicles) as part of the planning[180];
- Transport and mobility services such as on-demand transport, multimodality, service integration, urban/interurban and cross-border commuting (some having an impact on the working conditions)[181];
- Technology-enabled services (e.g. Mobility-as-a-Service, ride sharing apps, etc.)[182];
- Integrated space and mobility management,
- Digitalisation, big data and growth of e-commerce.

5.1.3.4. Impact of COVID-19 pandemic on resilience, health and safety in urban mobility

The **impact of the 2020 COVID-19 pandemic** has been significant, as it has shaken up transport, including at local level, in numerous ways. It has led – in particular in the first months – to a massive **drop in public transport usage** and to an **increase in active mobility**.

Various studies have also indicated a **link between air pollution and the risk of virus propagation and severity of its impact** and demonstrated that long-term exposure to air pollution might be expected to increase humans' susceptibility to COVID-19[183]. At the same time increased road safety risks for vulnerable road users[184] were observed. Cities and transport operators have been also struggling to accommodate the necessary social distancing rules due to insufficient space on public transport services, but also for pedestrians and cyclists, thus concerns when it comes to fair sharing of public space in cities have become more visible[185]. The Commission's Guidelines on the progressive restoration of transport services and connectivity[186] recommend that urban areas could consider temporary enlargements of pavements and increased space for active mobility options, as well as reducing speed limits of motorised vehicles in increased active mobility areas. Similarly, some rail operators used additional rolling stock to allow for more distance between passengers. The guidelines also indicate measures to be put in place to ensure the highest

[179] From those that were able to answer, it was noted by 9 out of the 46 interviewees that suggested additional areas of relevance.

[180] By 14 out of 42 interviewees.

[181] By 10 out of 42 interviewees.

[182] By 15 out of 42 interviewees.

[183] European Environment Agency, COVID-19 and Europe's environment: impacts of a global pandemic, 10/11/2020. Available at : https://www.eea.europa.eu/publications/covid-19-and-europe-s

[184] https://etsc.eu/covid-19-huge-drop-in-traffic-in-europe-but-impact-on-road-deaths-unclear/

[185] Cities have been struggling to accommodate the necessary social distancing rules due to insufficient space for pedestrians and cyclists; one of the most important revelations of the pandemic was the disproportionate distribution of public space in favour of motorised traffic, with cars accounting for ~30-40% of journeys but occupying ~70-80% of public space in European cities (COVID-19 SUMP Practitioner Briefing, https://www.eltis.org/sites/default/files/covid-19_sumppractitionersbriefing_final.pdf)

[186] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020XC0515(04)

safety for public transport passengers and stress the need to communicate clearly on them, to facilitate their smooth implementation, reassure citizens and maintain their confidence in public transport

Walking and cycling have proved to be the preferred mode in many cities during the crisis, combining the 'active' element (physical exercise) with the travel objective. This resulted in additional health benefits, reducing physical inactivity, a key risk factor of non-communicable diseases. In addition to being sustainable and active modes, they are also individual, and thus meet physical distancing requirements. As such, the World Health Organization[187] recommended walking and cycling for essential trips whenever feasible.

The pandemic has highlighted the role of urban logistics as an essential public service for the city, similar to passenger transport. Public transport has remained the backbone of sustainable mobility and is essential to economic recovery, with public transport drivers being essential workers. COVID-related lockdown measures have also led, at least temporarily, to significantly reduced car traffic and – thus – related air and noise pollution. In consequence, **air quality** has substantially, though temporarily, improved, with clear health benefits. In a poll, a big majority of Europeans have expressed a clear wish for this to continue, indicating that cities must take effective measures to protect citizens from air pollution, even if it means preventing polluting cars from entering city centres and reallocating public space to walking, cycling and public transport [188].

Since the strict lock-down measures were lifted in most of the EU (in the second half of 2020), many people who had used public transport before have switched to individual modes, with cars usage going up towards pre-pandemic levels; the situation remains dynamic.

The relevance of COVID when it comes to its impact on urban mobility was confirmed by publication (in July 2020) of **dedicated COVID-19 SUMP guidance** material[189]. It includes good practice of cities and recommendations on how to make urban mobility more resilient and sustainable during and after the coronavirus crisis, focusing on active mobility, urban space, and public transport and shared mobility.

Even though it is still too early to draw definite conclusions, it is highly likely that the COVID pandemic – with the changes it has brought to work, consumption and mobility patterns – will have a lasting impact on urban mobility. It is also an opportunity for cities to re-define their approaches and roll out measures – in particular those that privilege public and active transport[190] – that have been challenging to implement previously, mostly due to root causes as described in Section 2.2.

The experience of the pandemic has demonstrated, finally, that **resilience of cities as well as people's health and safety are of key importance** and these aspects should be better integrated in local transport strategies and measures[191]. As such, the impact of COVID should be considered when it comes to urban mobility.

[187] https://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2020/moving-around-during-the-covid-19-outbreak

[188] https://epha.org/no-going-back-to-pre-covid-air-pollution-levels-opinion-poll-finds/

[189] https://www.eltis.org/sites/default/files/covid-19_sumppractitionersbriefing_final.pdf

[190] European Parliament, Rapid-response briefing 'COVID-19 and urban mobility: impacts and perspectives', September 2020. Available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/652213/IPOL_IDA(2020)652213_EN.pdf

[191] European Parliament, Rapid-response briefing 'COVID-19 and urban mobility: impacts and perspectives', September 2020. Available at: https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/652213/IPOL_IDA(2020)652213_EN.pdf

5.2. Effectiveness

This section discusses how successful has the UMP been in achieving or progressing towards its objectives.

5.2.1. Contribution of the Urban Mobility Package towards a more competitive and resource-efficient urban mobility in the EU

Making **a direct link between the UMP and its intended outcomes** (i.e. reduced emissions and energy consumption; reduced congestion and better mobility along TEN-T; modal shift towards more sustainable means of transport; improved quality of life in cities; business opportunities for developing innovative transport and mobility services; better-coordinated and effective implementation of urban policies) is challenging. As stated in Section 3, it cannot be established that the mobility situation in EU urban areas has improved significantly as a result of the implementation of the UMP. This finding is supported by the responses to the stakeholder consultation, which indicate that the UMP objectives were very ambitious and over-arching while the measures proposed in the 2013 Communication were only soft and non-binding in nature, without a firm link to EU funding. Additionally, a significant number of the interviewed stakeholders[192] find it difficult to assess the extent to which the UMP has achieved its objectives as they are not familiar with it and could only comment on urban mobility developments in their own cities, and because there are no targets and indicators to measure progress. It is also noted that recording a significant improvement would require some of the UMP measures to be implemented for a longer period of time.

Nonetheless, the public consultation and the Court of Auditors report indicate **the areas in which the UMP has likely had an impact**. The majority of EGUM members who completed the survey stated that the Package has contributed to a modal shift towards sustainable modes of transport[193], and to improving the quality of life in urban areas[194] to a greater or lesser extent. Local authorities and civil society at the local and regional levels, on the other hand, indicated that in some cases the Package has contributed to an increased coordination in the implementation of urban policies. EU-level stakeholders[195] underscored the role that the UMP has played in establishing a common language, and in streamlining and consolidating the initiatives of the EU in the area of urban mobility. The Court of Auditors has also noted that the coverage and accessibility of public transport in cities and their surrounding areas has been improving, with EU funds playing a role.

The Package was seen as an important step in promoting the concept of SUMPs and setting a basis for other EU urban mobility developments. A relevant example was provided by the European Investment Bank (EIB) according to which whether or not a city has a SUMP is a factor taken into consideration when making an investment decision. While this was also done prior to the UMP, its implementation gave legitimacy to this practice.

5.2.2. Effectiveness of the EU-level UMP measures

This section presents the evidence with regards to the following aspects of the Package: SUMPs; coordinating public and private sector interventions; and reinforcing EU support.

[192] 44 out of 67 interviewees.

[193] 12 out of 17 EGUM members.

[194] 11 out of 17 EGUM members.

[195] 15 out of 18 of the EU level stakeholders that were interviewed.

5.2.2.1. Sustainable Urban Mobility Planning (SUMP)

The level of awareness of the concept of SUMPs is relatively high, it varies significantly between the EU Member States. While the stakeholders consulted were all familiar with the concept, a survey conducted in 2018 by CIVITAS showed that representatives of 25% of the surveyed countries had limited or clearly insufficient levels of awareness[196].

The evaluation found that **SUMP guidelines were well known and were used, translated or integrated with national best practice** in 10 Member States[197,198]. Compliance with the SUMP concept and guidelines varied considerably[199] based on the SUMP Self-Assessment, completed by stakeholders as part of the case studies, where the overall scores were generally below 70%. This provides an indication that there is some discrepancy between the recommended and actual SUMP content and processes[200].

It is noteworthy that the development and adoption of a SUMP did not necessarily ensure that it has a high quality or its implementation was guaranteed. Developing and using **monitoring and evaluation schemes** and employing external quality control assistance were found to be important factors, which likely influenced the SUMP's effectiveness. This is also confirmed by the observations of the Court of Auditors that noted that '*In none of the cities we visited in Italy and Spain was there external assessment of the quality of the adopted SUMPs. There is, therefore, a risk that the adoption process may become an administrative formality to get access to funds and that the SUMP may thus not be of the quality needed to drive improvements in urban mobility*.'

With respect to **implementation**, the Bulgarian case study showed that, in that country, in most cases SUMPs were adopted because they were expected to be a prerequisite for access to funding from the European Regional Development Fund (ERDF) Operational Programmes. It might point to a risk that a number of SUMPs have and will be developed and adopted merely as a formality without making decisive steps toward introducing urban mobility measures. The Court of Auditors in their report[201] suggested that the **link between the use of EU funding** and the Country-specific Recommendations should be strengthened, also to address this issue[202]. Annex D of the 2019 European Semester Country Reports[203] presents an investment guidance on cohesion policy funding 2021-2027 for each Member State also explicitly mentions SUMPs in 16 of the country reports[204].

The majority of respondents to the public consultation noted that SUMPs were an **effective mechanism for planning and delivering sustainable urban mobility**[205]. In addition, the

[196] Status of SUMPs in European Member States, CIVITAS SUMPsUP (2018). Retrieved from https://sumps-up.eu/fileadmin/user_upload/Tools_and_Resources/Reports/SUMPs-Up_-_SUMP_in_Member_States_report_with_annexes.pdf

[197] Ibid.

[198] The section of the ELTIS website that includes the SUMP guidelines was visited nearly 12 000 times in 2019 (based on information provided by ELTIS).

[199] E.g. the score for the SUMP of Burgas (BG) was 70.5%, for the SUMP of Braga (PT) - 57.5%, for the SUMP of Malmo (SE) – 65%, for the SUMP od Umea (SE) – 65%, for the SUMP of Ghent (BE) – 78%, for the SUMP of Beja (PT) – 78%.

[200] It should be, however, recognised that there is a difference between meeting the definition of the SUMP concept and following the process as provided in the Guidelines. There can be a SUMP without following all aspects of the Guidelines but there cannot be a proper SUMP without covering all the aspects of the concept.

[201] Special report 06/2020: Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment. Available at: https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=53246

[202] This recommendation was contested by some Commission services.

[203] Available at: https://ec.europa.eu/info/publications/2019-european-semester-country-reports_en

[204] The country reports of Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia and Spain.

[205] 74% of respondents.

SUMP process, which stresses the importance of **participatory approach** and proper involvement of citizens and stakeholders, has also helped to ensure a high level of acceptance and support for the plans and measures included in it. For example, in Sofia an active citizen participation platform provided citizens with information on the purpose of the city's SUMP and the progress of its development, whilst allowing them to submit opinions, suggestions and proposals, while in Budapest an 'interactive two-way communication with high-level decision makers' activity deepened their knowledge of sustainable urban mobility planning, encouraged their engagement in the process and helped to ensure their higher commitment to SUMP[206].

Similarly, SUMPs have shown to have the potential to effectively contribute to **achieving a numerous societal objectives linked with transport**, in particular when it comes to **reduction of air pollutant and CO2 emissions, reduction of congestion and deaths and injuries from road crashes in urban areas**. The following examples illustrate this:

- **air quality improvements**[207,208], with for instance Madrid experiencing a 15% reduction in nitrogen dioxide pollution in three months after establishing low emission zones in its SUMP in November 2018[209];

- **reduction of CO2 emissions**, with for instance Torino recording 12% decrease in daily emissions from urban logistics thanks to multi-users lanes for freight transport measure included in their SUMP[210];

- **reductions in car use**, with for example Milan managing – thanks to measures included in its SUMP of 2016 – to bring the number of residents using cars down to 50%, well below the Italian average[211];

- **reduced impact of road crashes**, with for instance Greater Manchester being successful in reducing deaths and serious injuries to road users thanks to a strategic approach to road safety in its SUMP[212];

- **increased active mobility**, with for example Tartu (Estonia's second-largest city) managing to double its modal share of cycling from 4% to 8% in five years through investments in public infrastructure[213];

- **increase in public transport**, with for instance Klaipeda (Lithuania) aiming to bring it up from 30% in 2017 to 42% in 2030 thanks to its SUMP implementation[214].

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[206] SUMP Good Practice Fact Sheets, CIVITAS SUMPs-UP. Available at: https://sumps-up.eu/fileadmin/user_upload/Tools_and_Resources/Publications_and_reports/Good_Practice_Fact_Sheets/SUMPs-Up__-_City_Good_Practice_Factsheets_compressed.pdf

[207] Pisoni et al. (2019). Evaluating the impact of 'Sustainable Urban Mobility Plans' on urban background air quality.

[208] Quantifying the Effects of Sustainable Urban Mobility Plans, JRC, 2013.

[209] ELTIS, What are the benefits of Sustainable Urban mobility Planning. https://www.eltis.org/mobility-plans/12-what-are-benefits-sustainable-urban-mobility-planning

[210] SUMP Good Practice Fact Sheets, CIVITAS SUMPs-UP. Available at: https://sumps-up.eu/fileadmin/user_upload/Tools_and_Resources/Publications_and_reports/Good_Practice_Fact_Sheets/SUMPs-Up__-_City_Good_Practice_Factsheets_compressed.pdf

[211] Ibidem

[212] Urban road safety and active travel in SUMP. https://www.eltis.org/sites/default/files/urban_road_safety_and_active_travel_in_sumps.pd_.pdf

[213] ELTIS, What are the benefits of Sustainable Urban mobility Planning. https://www.eltis.org/mobility-plans/12-what-are-benefits-sustainable-urban-mobility-planning

Moreover, it can be reasonably expected that the additional **SUMP topical guidance** materials that have started to be published as from October 2019[215] and which provide comprehensive planning recommendations on the most relevant topics, will further support local authorities in tackling the most salient urban mobility challenges. They will, thus, strengthen the added-value of the SUMP approach and its effectiveness.

The **effectiveness of SUMPs was also acknowledged by the Court of Auditors** in their report, reflecting its importance in both recommendations. The Court has called for systematic collection of data on urban mobility and on the adoption of SUMPs in all EU urban nodes by Member States, and that EU funding should be linked with SUMPs. It has specifically proposed that accessing cohesion and structural funds for urban mobility should be conditional on the existence of a SUMP, and that Connecting Europe Facility should give a higher priority to those projects proposals in urban nodes that are in line with SUMPs. At the time of the publication of the special report, the Commission underlined that it could only partially accept the first recommendation, highlighting, for the Cohesion Fund and ERDF, that "the success [for implementing the Recommendation] would "depend on the cooperation of the Member States" during the discussions on partnership agreements and programmes.

All types of stakeholder who participated in the consultation activities agree that the **EU support** provided to national, regional and local authorities with respect to SUMPs is of great significance. This was shown in the public consultation where a large majority[216] of respondents stated that the EU support to national and regional authorities with respect to SUMPs is largely or moderately important. In addition, more than a third of them noted that EU involvement was necessary in order to provide local authorities with support and funding to enable the scaling up of SUMPs. Similarly, more than half of the EGUM members[217], who took part in the survey targeting national authorities, indicated that their Member States had benefited from EU support in setting up SUMPs.

Finally, the evaluation shows that the **European Platform on Sustainable Urban Mobility Plans**, which is part of ELTIS – the Urban Mobility Observatory, is one of the most recognisable tools associated with the Package and is generally perceived to be useful. Based on data about the website visits, the most visited pages in 2019 were the news, followed by the case studies and the events. The website received most views from the USA, Germany, China, France and the UK.[218]

The value of the Platform and ELTIS in general, is considered to be particularly high for stakeholders[219] from the Member States that do not have similar platforms and sufficient resources to develop them. Despite the perceived usefulness of the Platform, feedback received from several stakeholders[220] during consultation activities suggests the need to

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[214] ELTIS Case study 'Planning for a healthy, connected and comfortable Klaipeda', available at: https://www.eltis.org/resources/case-studies/planning-healthy-connected-and-comfortable-klaipeda-0 and https://www.klaipeda.lt/data/public/uploads/2018/09/output-7.pdf. In the latter document, page 17 of the plan shows the 2017 status and projected 2030 modal split with no SUMP; while page 30 shows the projected 2030 modal split in line with SUMP implementation.

[215] Available at: https://www.eltis.org/mobility-plans/topic-guides and https://www.eltis.org/mobility-plans/practitioner-briefings

[216] 88% of respondents.

[217] 9 out of 17 EGUM members.

[218] Information provided by ELTIS.

[219] This was a view which was in particular prevalent among the Bulgarian stakeholders.

[220] 4 civil society organisations at EU/national level, 1 civil society organisation at national level, 1 local authority.

increase its effectiveness and usefulness, to overcome the voluntary aspect of data reporting as well as data accuracy and reliability.

5.2.2.2. Coordinating public and private sector intervention – guidance documents

The findings show that the **level of awareness and use of the study and guidance documents on urban logistics was low**, among both EGUM members[221] and local authorities. In particular, several interviewed representatives of local authorities noted that they were not promoted sufficiently at Member State level. Similarly, there is limited evidence with regard to the level of awareness and use of the study and guidance documents on **UVARs**. While some[222] EGUM members stated that they were aware of them, a very small number of interviewees noted that they had been used with a limited effect. The low level of awareness of guidance, coupled with their non-binding character, might have also led to uncoordinated implementation of various UVAR schemes across the EU, with some negative consequences for the single market.

The level of awareness among interviewees of the good practice examples for **road safety** developed by the European Commission was also limited and only a few EGUM members[223] indicated that they were aware of them.

5.2.2.3. Reinforcing EU support

While the development of the Urban Mobility Scoreboard is a currently ongoing, a significant proportion of the consulted stakeholders[224] were aware of it, and considered the **Sustainable Urban Mobility Indicators**[225] pilot project to be a welcome and necessary step towards establishing a harmonised framework across Europe with which to evaluate and compare performance., In addition, feedback received from cities, academics and transport stakeholders during a dedicated event[226] indicated a need for further refinement of the indicators set in line with the specificities of the European context and the experienced data collection problems, as well as a need for a technical and advisory assistance to the cities in that regard.

It was not possible to establish conclusive evidence with regard to the awareness about, and the usefulness of, **EGUM** among the interviewees. While a number of stakeholders were aware of it (mostly representatives of national authorities and EU organisations closely familiar with the UMP), the level of awareness among local stakeholders was low[227]. A small number of interviewed stakeholders noted that the EGUM had been useful for having a dialogue. However, stakeholders found it generally challenging to provide information on the contributions of the Expert Group. Suggestions to change its structure and format - such as opening participation to local authorities and city networks, and to set measurable goals - were made in order to improve its effectiveness.

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[221] 5 out of 17 EGUM members.

[222] 8 out of 17 EGUM members.

[223] 7 out of 17 EGUM members.

[224] This was noted by 29 out of 67 interviewees, and 4 out of 11 surveyed National Authorities.

[225] SUMI, a pilot project of the European Commission that developed a comprehensive set of practical and reliable indicators that support cities to perform a standardised evaluation of their mobility system and to measure improvements that result from new mobility practices or policies; https://ec.europa.eu/transport/themes/urban/urban_mobility/sumi_en

[226] 7th Florence Intermodal Forum: Towards a Common European Framework for Sustainable Urban Mobility Indicators, 18/09/2020. https://fsr.eui.eu/event/towards-a-common-european-framework-for-sustainable-urban-mobility-indicators/

[227] 10 out of the 67 interviewees were aware of the EGUM.

The **CIVITAS Initiative** is considered to be an important vehicle for furthering the EU agenda in the area of urban mobility. It includes a total of 287 CIVITAS demonstration[228] and non-demonstration cities, with those from Greece, Italy and Spain being the most active participants. The number of CIVITAS events and the participation rate of its annual conference has increased in the past few years. The evidence also indicated that taking part in CIVITAS projects and events was considered to have a positive impact by facilitating the accumulation of knowledge and supporting the introduction of urban mobility measures.

Sustainable Urban Mobility is one of the action clusters of the **European Innovation Partnership on Smart Cities and Communities (EIP-SCC)**[229] and includes initiatives in the areas of Electric Vehicles for Smart Cities and Communities, New Mobility Services and Urban Air Mobility. Since 2014, EIP-SCC has funded a total of 12 Lighthouse projects through Horizon 2020. The largest number of projects is located in Spain, Italy and the United Kingdom. SUMPs are also being recognised as one of the starting points for integrated planning for Smart City Plans[230].

Outside the EU, at least two SUMPs have been developed– in the Dominican Republic (Santo Domingo) and Cameroon (Yaoundé) through the Mobilise Your City[231] programme. There are ongoing discussions (e.g. with China[232]) and relevant support is provided to third countries (e.g. to Turkey[233]). In terms of results, it is considered to be too early to identify tangible effects of the SUMPs' development and implementation. Nonetheless, the evidence shows that while the international cooperation component is not one of the cornerstones of the UMP, it is an area with interest expressed by third countries.

While the **European Mobility Week**[234] campaign is not included in the UMP, it is closely related and referenced as an important EU tool in the field of urban mobility. The findings indicate very high levels of awareness and participation in the European Mobility Week. Figure below also shows that while the level of participation fell immediately after the implementation of the UMP in 2013[235], it has since risen consistently and appears to still be on a rising trajectory. The largest number of cities and towns that take part in the initiatives are located in western and southern Europe, but the participation rate among cities in central and eastern European countries has increased in the past few years. Member States located in northern Europe have significantly lower rates of participation.

[228] Since its inception in 2002, the CIVITAS Initiative has tested urban transport solutions as part of demonstration projects in more than 80 Living Lab cities.

[229] European Commission (2012). Communication from the Commission: Smart Cities and Communities – European Innovation Partnership. C(2012) 4701. Available at: https://ec.europa.eu/transparency/regdoc/rep/3/2012/EN/3-2012-4701-EN-F1-1.PDF

[230] Available at: https://eu-smartcities.eu/sites/eu-smartcities.eu/files/2019-07/Smart%20City%20Guidance%20Package%20LowRes%201v22%20%28002%29_0.pdf

[231] https://mobiliseyourcity.net/

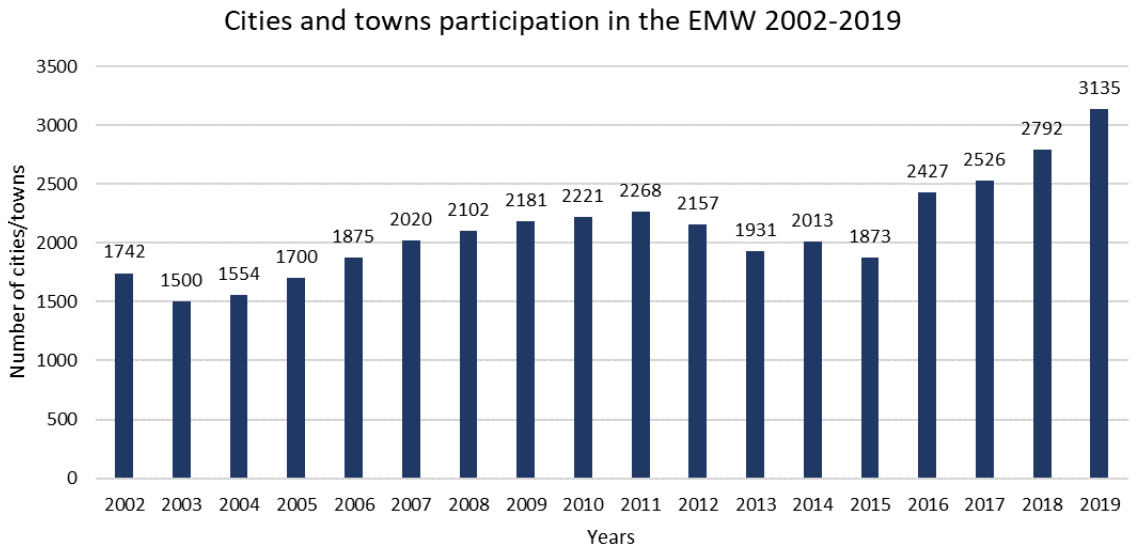
[232] https://www.sustainabletransport.org/archives/7539

[233] https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/c_2019_8726_ad_transport.pdf

[234] https://mobilityweek.eu/home

[235] European Commission DG MOVE's 'Do the Right Mix' campaign ran alongside European Mobility Week to strengthen it from 2012 to 2015, at which point it was merged with European Mobility Week. EMW was run by European Commission DG ENV until end 2013, i.e. 2014 was a transition year. There was some initial confusion between the two campaigns, so a clear separate visual identity was established and from this point the campaign has witnessed unprecedented participation numbers.

Figure 3. Number of participating cities and towns in the European Mobility Week 2002-2019



Source: Based on information provided in Evaluation of the European Mobility Week 2019, Technopolis Group

Moreover, the number of 'permanent measures' is also a relevant indication of the effectiveness of the campaign. These are permanent infrastructure interventions that help people make sustainable transport choices, with the aim to show the commitment of the town or city to sustainable urban mobility. In 2019 there were 6,765 more permanent measures than in 2018 (15,613vs 8,848) – the highest since the monitoring began in 2012. The total number of permanent measures – indicating also the popularity of their different categories – that have been implemented overall (since 2007) and in 2020 during European Mobility Week relates to the following areas[236]:

- New or improved bicycle facilities: 17,655 (2020: 2308)
- Pedestrianisation: 14,989 (2020: 1701)
- Public transport services: 14,981 (2020: 1874)
- Traffic calming and access control scheme: 14,435 (2020: 2073)
- Accessibility for persons with disabilities or reduced mobility: 23,997 (2020: 3032)
- New forms of vehicle use and ownership: 8,029 (2020: 1332)
- Freight distribution: 3,171 (2020: 719)
- Mobility management: 25,981 (2020: 3044)

Given that the main objective of the campaign is to raise awareness and communicate good practice to encourage a shift to more sustainable modes of mobility, data on the media and website coverage are of high relevance. The 2019 participation report data[237] shows over 78

[236] https://mobilityweek.eu/registration/

[237] https://mobilityweek.eu/fileadmin/user_upload/materials/participation_resources/2019/Participation_report/2019_EMW_Participation_Report.pdf

000 visits to the European Mobility Week website in September 2019 and almost 82 million impressions of #MobilityWeek and #walkwithus hashtags[238] on social media.

In addition, it was established that the European Mobility Week contributes to raising awareness on the topic of urban mobility and forming new partnerships among local stakeholders. This corresponds to the input from targeted interviews, where the majority of stakeholders[239] at the local level commented on its usefulness in raising awareness and inspiring change to more sustainable forms of urban mobility.

5.2.3. Contributing and hindering factors

Several **contributing factors** emerged from the analysis. In particular, that – where available – **EU funding** was a decisive factor for the development and implementation of many urban mobility measures across the EU. The Bulgarian case study, for example, showed that EU financial support through the European Structural and Investment Funds and individual projects, funded through European programmes such as Horizon 2020, is perceived to be the most significant driver behind most of the developments in the area of urban mobility in the country.

The interviews with local stakeholders point that EU support, including **capacity building activities and events**, was also credited for having a significant positive impact (particularly in Bulgaria, Portugal and Belgium)[240]. Similarly, linking EU funding to SUMPs could play an important role in their development (as was the case in Bulgaria). This is also confirmed by the findings of the Court of Auditors that state that making an *adopted SUMP a condition for funding has proven to be a strong incentive for cities to develop urban mobility strategies in Italy and Spain*. However, as stated above, it does not guarantee SUMP quality or implementation.

Other factors found to be significant at national level from both desk research and the conducted interviews included the availability of dedicated national regulatory and financial frameworks, and a focus on addressing environmental and climate change concerns, thus improving the quality of life for citizens and increasing the attractiveness of urban areas. Political support and ambitious local authority teams were also found to contribute positively to the implementation of urban mobility measures.

The assessment showed however that there is a **significant number of factors that hinder** the development and implementation of urban mobility measures. The analysis of the conducted interviews showed that the **lack of funding** was an often-stated issue by nearly all stakeholders. The findings of the Court of Auditors corroborate this, indicating that financing the demands of sustainable urban mobility is an issue for many cities. This concerns in particular financing of public transport where '*financial commitment involved extends beyond investments in public transport infrastructure and rolling stock – for which the EU can*

[238] Each edition of EMW has a dedicated theme and a related hashtag allowing its identification and supporting the dissemination on social media; Walk with Us was the 2019 theme. In addition, every year the general hashtag (#mobilityweek) is also used.

[239] This was noted by 12 out of 19 local level interviewees. Overall, 64 out of the 67 stakeholders were aware of the European Mobility Week, with 41 out of 67 answering that they had participated.

[240] In particular, 9 out of 19 local level interviewees noted that capacity building of activities and events had been a positive impact. In addition, it was noted by 4 out of 11 interviewees from Bulgaria, 7 out of 15 interviewees from Portugal and 4 out of 10 interviewees from Belgium.

provide financial support - to operational and maintenance costs, which can be significant[241] *and for which the EU does not provide any financial support*'.

Other factors were also identified, among others:

- external factors such as fuel prices that affect the attractiveness of private cars vs. public transport[242];
- lack of political will to enact policies deemed to be unpopular because they are thought to threaten the convenience of citizens[243];
- turnover of staff and priorities associated with the election cycle;
- low level of awareness of urban mobility concepts in local governments, and
- a slow pace of adapting national policy frameworks to new developments.

Additionally, the case studies showed that there was a clear distinction between Member States that have an established national urban mobility framework (such as Sweden and Portugal) and those that have a more fragmented approach (Belgium and Bulgaria). Specifically, consulted stakeholders from Belgium (from 10 interviews) noted that the different regional approaches often lead to miscommunication. Bulgarian stakeholders (from 12 interviews) stated that the lack of a national regulatory framework for urban mobility, financing and a dedicated body to steer and oversee the overall process had negatively affected the ability of local authorities to introduce urban mobility measures.

Moreover, it was found that the shortage of staff capacity (particularly in smaller urban areas), lack of sufficient expertise, and traditional priorities that favour infrastructural projects and measures targeting motorised forms of transport, also limited the extent to which urban mobility measures were implemented. The findings also show that strategic documents and plans such as SUMPs were not always sufficiently integrated with existing national frameworks, which in some cases negatively affected any probability of them being realised, and a lack of sufficient data and cooperation between different levels of administration often hindered urban mobility measures.

5.2.4. Assessment of whether the same results would have been realised without the Urban Mobility Package

There is robust evidence that the UMP has contributed to two of its intended outputs: reinforcing EU support to Member States and ensuring that SUMPs are developed and implemented.

Notably, the interviewed stakeholders[244], who were familiar with the **European Platform for Sustainable Urban Mobility Plans** were of the opinion that it (and ELTIS in general) had provided its users with a good source of information, allowing to share best practice, which would have otherwise been more difficult or impossible to access. Similarly, the **SUMP guidelines**, which have either served as a basis for national guidelines or been translated into

[241] For example, in 15 years, the running costs of public transport in Barcelona more than doubled, from €646 million in 2003 to €1 373 million in 2017. During this period, the national contribution increased to €200 million in 2010 but has been decreasing since and, at the time of the audit, amounted to slightly above €100 million.

[242] In that regard the Court of Auditors observed that '*The risk of more car use increases in periods of decreasing fuel prices. For example, in Hamburg and Leipzig fuel prices decreased considerably between 2012 and 2018 while ticket prices increased by up to 40 %'.*

[243] As the Court of Auditors noted: '*Persuading citizens to leave the comfort of their cars for other forms of transport is often a challenge. For example, the introduction of the congestion charge in Stockholm required an initial test phase before it could be fully introduced. Although citizens were initially resistant to the idea, now they do not wish to go back to the initial situation without congestion charges'.*

[244] 15 out of 67 interviewed stakeholders.

national languages[245], were well known among the consulted stakeholders[246]. They are considered to have contributed to the development and implementation of SUMPs, and their use was included as a requirement in the tendering procedures associated with the development of some SUMPs.

Additionally, the **provision of EU support** through EU-funded projects for training and capacity building, and for the development of SUMPs and the implementation of urban mobility measures, is found to have had a significant impact and was highly rated by a notable number of interviewed stakeholders[247] (particularly in Bulgaria and Portugal). Lastly, the Package is also credited for providing **focus and a common narrative**, which provided the basis for a stronger EU involvement in the field of urban mobility.

5.2.5. Promotion of EU concepts and tools at national local level

The assessment of the case studies shows that the promotional level of EU concepts and tools varied significantly between the targeted Member States. Some Member States did not have a promotional mechanism in place, while national authorities in others did occasionally engage in activities to promote some EU concepts and tools. For example, many countries (such as Portugal, Germany, Austria, Spain, Greece or Poland[248]) promote participation in the European Mobility Week to municipalities and councils with the assistance of several public authorities. Similarly, in Portugal, the Institute for Mobility and Transport supported the promotion of the SUMP guidelines and a survey conducted by the institute showed that more than half of the Portuguese municipalities that took part in it were familiar with the guidelines.

Generally, the targeted interviews show that EU concepts and tools were most well-known by stakeholders[249] who had been involved in European programmes and projects, and had attended EU-funded capacity building activities and events. The UMP-specific tools were known to a limited group of stakeholders active in this field. Local authorities were often unable to indicate if the UMP recommendations were implemented or if they had had an effect on their operations.

5.2.6. Allocation of responsibility between the EU and Member States with respect to the current needs and capacities at local level

EU financial support, EU programmes and projects, and EU-funded capacity building and training activities are important aspects of the development of urban mobility in the EU; in some Member States these measures are credited for being the driving force behind such developments. The results of the public consultation show that there is a perceived need for further EU involvement[250]. Similar evidence was found from the Bulgarian case study, where stakeholders[251] noted that EU requirements and measures are perceived to be more salient and effective for bringing about desired actions. On the other hand, results of public consultation

[245] Or indeed also into non-European languages, such as Mandarin (https://www.eltis.org/sites/default/files/20200414_sump-guidelines-2019-cn_new.pdf)

[246] This was noted by 18 out of 67 interviewees, by 33 out of 178 participants in the Public Consultation and by 9 out of 11 national authorities in the online survey.

[247] This was highlighted by 39 out of 67 interviewees (including 4 out of 11 Bulgarian interviewees and 7 out of 15 interviewees from Portugal).

[248] European Mobility Week, Best Practice Guide 2019-2020. Available at: https://mobilityweek.eu/fileadmin/user_upload/2020%20EMW%20Best%20Practice%20Guide.pdf

[249] This is an observation that crosscut numerous interview questions and the views that were provided.

[250] 169 out of 207 participants in the Public Consultation noted that EU involvement was important.

[251] This was noted by 6 out of the 11 Bulgarian interviewees.

showed that almost all respondents[252] agreed that the preferred approach to urban mobility at EU level was through supporting shared experiences, promoting best practices and fostering cooperation.

There are significant differences between Member States in their approach to urban mobility with respect to the regulatory, financial and technical frameworks made available to local authorities. In particular, while some Member States have well-defined and long-established support mechanisms, local authorities in other Member States do not enjoy such support from the national governments and therefore rely more heavily on EU tools and support. For example, the Bulgarian case study showed that in the absence of a clear national regulatory and support framework for urban mobility, a non-governmental organisation took over some of the responsibility, such as translating the SUMP guidelines or acting as a contact point with EU institutions. This type of involvement, however, is dependent on EU project funding and is therefore not considered to be consistent. Similarly, there is evidence that some local authorities rely on cities organisations to stay informed on EU developments in the area of urban mobility. This is an indication that the needs and capacities of local authorities in some Member States are not met, and that developing and implementing urban mobility measures is challenging.

The UMP foresaw the involvement of national authorities as intermediaries to address this issue. However, **there is limited evidence that the Member States have systematically taken an active and consistent role in applying all the UMP measures**. In some cases, the legal framework at national level defines urban mobility as an area that falls within the jurisdiction of local authorities; while in others there are more than one ministry that has mandate over urban mobility. These institutional settings limit the extent to which Member States could fulfil their recommended function.

Unequal levels of involvement of Member States has been also visible in the work of the **EGUM**, impacting its effectives. This was also observed by the stakeholders[253] who indicate that the role and format of EGUM could be changed due to the limited level of awareness of its existence and contribution. Suggestions were made to set clear targets for its performance and to involve additional stakeholders, such as representatives from cities, regions and city networks, in order to better represent and reach local authorities.

In line with the UMP (and the understanding of the subsidiarity principle in 2013), Member States and their cities are not obliged to follow the European guidance (also when it comes to ensuring that the SUMPs guidelines are observed) nor provide data on urban mobility, including on SUMPs[254]. In addition, there is no EU-level obligation when it comes to linking EU funding with SUMPs. This in particular affects the area of **SUMP implementation and quality assurance**; according to the Court of Auditors '*there was limited take-up – notably in terms of preparing SUMPs'*. Similarly, the Court observes that '*There is no EU requirement for access to funding to be conditional on SUMP preparation, although some Member States have imposed this condition at the national level*'. Therefore, '*although a number of cities are working towards it, there were still many urban nodes that had not adopted a SUMP*'.

The lack of legislative obligation for Member States in that regard coupled with divergent national (and in some cases, also regional) approaches and different capacities of local

[252] 98% of respondents.

[253] Of those who were aware, it was indicated by 9 out of 67 Interviewees that the role and format of EGUM could be changed.

[254] For example, the data on SUMP is uploaded to the ELTIS website on a voluntary basis and thus may not be entirely reliable nor reflect the latest position.

authorities have clearly contributed to sub-optimal SUMP take-up, implementation and performance.

5.2.7. Effectiveness of the Member State-level UMP measures and UMP contribution to it

As stated in Section 3.3.1, a large majority of Member States have national plans dealing with SUMPs in place, as well as the legal, financial and technical tools supporting urban mobility approach implementation[255]. It hints to a **contribution of the UMP to the implementation of integrated urban mobility policies at the local level** and changes in national frameworks that could be attributed to the UMP. The majority of EGUM members who responded to the survey targeting national authorities provided a positive assessment in that regard[256]. In addition, the case studies found some indications that the SUMPs have contributed to the development of a more integrated approach to urban mobility at local level as they entail a more participatory and transparent approach.

In addition, CIVITAS SUMPs-Up project identified some **best practice examples in relation to five key elements of the national SUMP frameworks**, an important Member State-level measure. There are several countries and regions with well-developed frameworks that stand out for more than one element[257]:

- Legislation: France, Portugal, Catalonia in Spain, Belgium;
- Financial resources: Catalonia in Spain, Portugal, Belgium, Slovenia;
- Guidelines: Sweden, Hungary, France, Flanders in Belgium.
- Monitoring and evaluation: France, Catalonia in Spain, Flanders in Belgium, Portugal, Czech Republic, Sweden, Poland;
- Information, education and knowledge exchange: Wallonia in Belgium, Sweden, Czech Republic, Slovenia, Catalonia in Spain.

There is limited evidence on the direct contribution of the UMP in encouraging the development of **national frameworks supportive of urban access regulation schemes**. While 84 new UVARs have been introduced in eight Member States since the implementation of the UMP, as noted previously, it is difficult to state with certainty whether these developments were linked to the Package directly or were a consequence of the Ambient Air Quality Directive. It should be also noted that the UVAR schemes have different characteristics and their implementation have not been coordinated across the EU.

The Court of Auditors report provides additional explanation of relatively low uptake of UVAR measures at local level, focusing on congestion charges: '*Only very few cities applied congestion charges, despite their potential benefits in terms of reducing congestion, increasing sustainability and providing added income. This can be partly explained by the specific contexts of individual cities. For example, a city might be reluctant to consider a congestion charge if that made it less attractive to citizens and businesses compared to*

[255] Detailed analysis by Member State is included in Annex 3 of the evaluation support study.

[256] 10 out of 15 EGUM members noted that it had led to the development of well-integrated urban mobility approaches.

[257] CIVITAS SUMPs-UP, *The Status of SUMPs in EU Member States*, summary report. Available at: https://sumps-up.eu/fileadmin/user_upload/Tools_and_Resources/Publications_and_reports/Status_of_SUMP_in_EU_Member_States/SUMPs-Up___PROSPERITY-SUMP-Status-in-EU-Report.pdf

neighbouring cities without a congestion charge'. On the other hand, the assessment of the SUMPs reviewed in the supporting study shows that 48% of them included considerations for using UVAR measures.

No robust evidence was found concerning the direct contribution of the UMP in ensuring coordinated **deployment of ITS in urban areas at local level effect**. While two EGUM members stated that it had contributed to it, this was not supported in the interviews. Urban ITS measures, particularly in the area of public transport (such as smart ticketing), have been present, especially in large cities, with funding (in particular through Operational Programmes) mobilising further deployment of such systems, as was seen in the case studies of Bulgaria and Portugal. In Belgium, urban ITS was predominantly addressed through municipal initiatives and projects, and the interviews did not show a clear link to the UMP. It seems that the dedicated EU legislation in the field (ITS Directive and its implementing acts) has played a more substantial role in implementation of ITS measures. Nonetheless, the assessment of the reviewed SUMPs shows that 69% of them included the use of urban ITS measures. Moreover, Regulation 1370/2007[258], which reformed Public Service Obligations in public passenger transport, also played some role towards the adoption of new technologies for planning, monitoring, contract management and evaluation of public transport systems.

There is limited evidence when it comes to a direct contribution of the UMP in consistently increasing the **consideration of urban freight logistics in national approaches to SUMPs**. National authorities that took part in the survey were split on this issue[259] and none of the interviewed targeted stakeholders at the national level agreed with this statement. The analysis identified four Member States (Czech Republic, Greece, Malta and Portugal) that have developed relevant national plans or supporting schemes since the implementation of the Package; however, it is not possible to establish a direct link between these developments and the Package. Lastly, the assessment of the reviewed SUMPs showed that 62% of them included the use of urban logistic measures.

Finally, there is some evidence on the direct contribution of the UMP in ensuring consistent **coordination of road safety aspects at a local level**. The assessment of the reviewed SUMPs shows that 83% of them included the use of urban road safety measures and a third of EGUM members stated that it had contributed, although little clear evidence was found through the conducted interviews. Still, as in the case of ITS, EU level legislation and policy on road safety (affecting transport in cities as well) might have played a significant role in implementing urban road safety measures by Member States. .

5.2.8. EU financing for urban mobility since the implementation of the Urban Mobility Package

5.2.8.1. Facts and figures

Providing targeted financial support is one of the five overarching measures under the Reinforcing EU support pillar of the UMP, which placed a particular emphasis on the European Structural and Investment Funds and the financial support provided under the Connecting Europe Facility to urban node projects on TEN-T network.

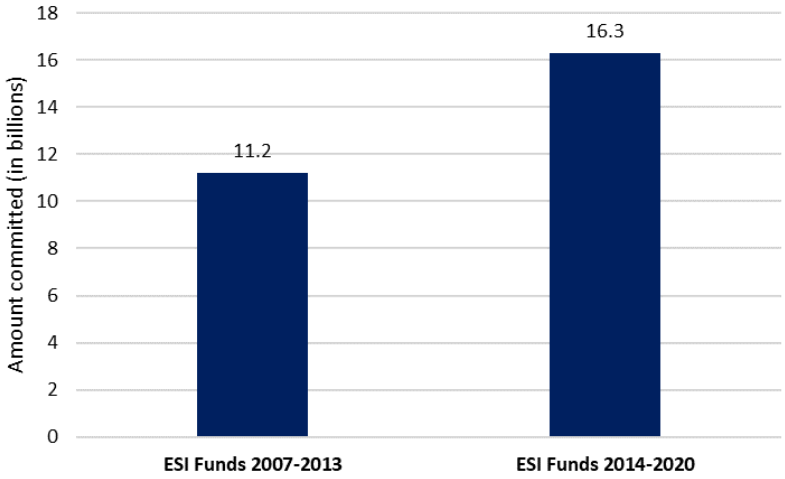
European Structural and Investment Funds (especially the European Regional Development Fund and the Cohesion Fund) are the main source of EU funding in the area of

[258] https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32007R1370

[259] 6 out of 15 answered that it had contributed; 6 out of 15 answered that they do not know; 2 out of 15 answered that there isn't such a framework in their country; 1 answered that it did not contribute.

urban mobility under Thematic Objectives 4 – *Low carbon economy* and 7 – *Sustainable transport and network bottlenecks*[260]. The EU funding from this source has increased from €11.2 billion in the 2007-2013 programme period to €16.3 billion for 2014-2020, showing a marked increase of EUR 5.1 billion, as noted in the report of the Court of Auditors and as shown in Figure . More specifically, '*this includes mainly funding for clean urban transport (2007-2013 €8.1 billion; 2014-2020 €12.8 billion), but also intelligent transport systems (ITS), cycle paths and multimodal transport*'.

Figure 4. European Structural and Investment funding for urban mobility for programming periods 2007-2013 and 2014-2020



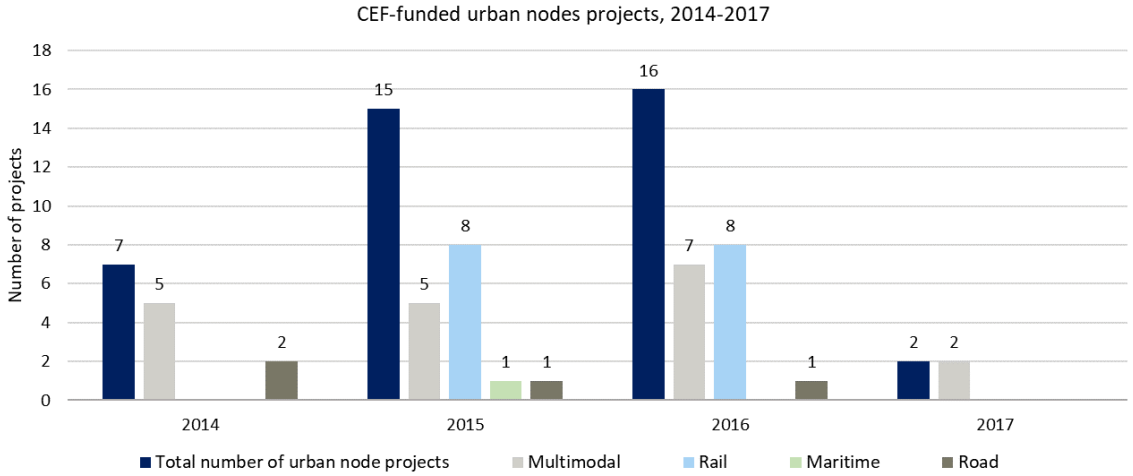
Source: Based on information provided in European Court of Auditors (2020) Special Report: Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment.

The **Connecting Europe Facility (CEF)** is the EU funding instrument for strategic investment in transport, energy and digital infrastructure, and in accordance with the TEN-T guidelines in the transport sector. The total funds under CEF for transport for the programming period 2014-2020 are EUR 24.05 billion, of which EUR 214 million has been used to fund 40 urban node projects[261]. Figure presents the number of projects that have been selected each year. The largest number of funded projects is located in France (13); followed by Spain (7); Germany, Poland and Sweden each have 3.

[260] http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/guidance_urban_mobility.pdf

[261] Article 36 of the Proposal for a Regulation of the European Parliament and of the Council on Union guidelines for the development of the trans-European transport network (COM/2011/0650 final/2 – 2011/0294 (COD)) set a priority of the European Commission to support the development of urban nodes, which are defined as key elements in the comprehensive Trans-European Transport Network (TEN-T), which serve as connecting points between different transport infrastructures.

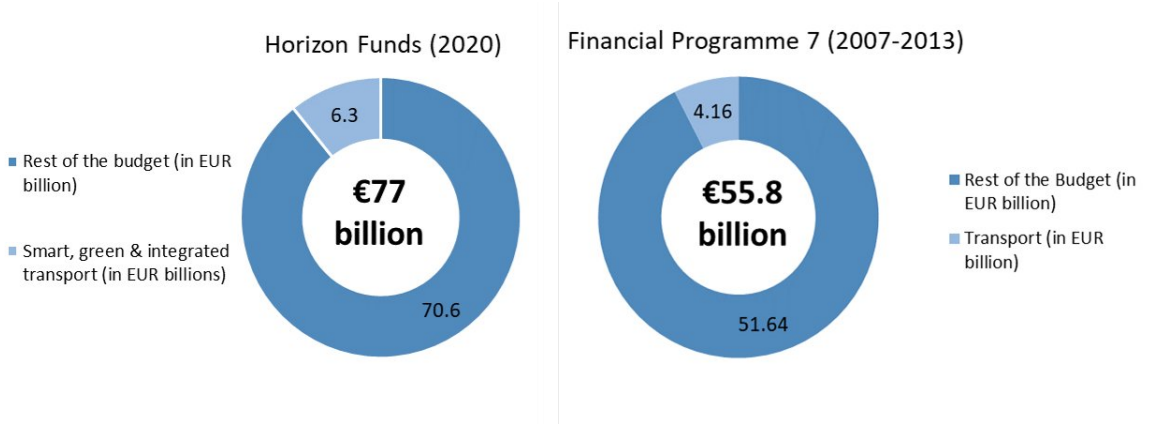
Figure 5. CEF-funded urban node projects, 2014-2017



Source: Based on information provided by INEA

Urban mobility projects are also funded under the EU Research and Innovation Programme **Horizon 2020**, which has allocated a budget of EUR 6.3 billion[262] to Societal Challenge 4: Smart, green and integrated transport during the programming period 2014-2020. The Work Programmes for 2014-2015 and 2016-2017 included calls specifically in the areas of urban mobility, logistics and ITS. The Work Programme 2018-2020 includes calls in the following relevant areas: Building a low-carbon, climate resilient future: Green vehicles; Building low-carbon resilient future: low carbon and sustainable transport; Safe, integrated and resilient transport systems. Overall, €171 million were provided to 30 urban mobility projects, managed by INEA.

Figure 6. Horizon 2020 funding in the area of smart, green and integrated transport relative to the total compared to Framework Programme 7, 2007-2014



The **European Investment Bank** also provides significant financial support to urban mobility projects. Since the implementation of the Urban Mobility Package it has provided

[262] It marks an increase compared to the EUR 4.16 billion budget allocated to transport during its predecessor, Framework Programme 7, 2007-2014.

loans of EUR 48.2 billion to finance projects in the transport sector[263], out of which EUR 21.3 billion was for 194 projects in the urban mobility field[264].

5.2.8.2.Effectiveness of EU financial support in the area of urban mobility

Overall, the consulted stakeholders had a positive view of the effectiveness of the EU financial tools. The majority of EGUM members[265], who took part in the survey targeting national authorities, stated that EU financial support met their needs to a large extent.

Similarly, an overwhelming majority[266] of respondents, who took part in the public consultation noted that EU financial support (particularly for the development of SUMPs) was very or moderately important.

The large majority of interviewed stakeholders[267] also agreed that EU funding, provided through ESI funding and Horizon 2020 projects, **had been very useful**. While this was evident across the four Member States selected for case studies, it is noteworthy that Bulgarian stakeholders were virtually unanimous (11 out of 11 interviewees) in their opinion that EU funding was instrumental and the main driver for most of the developments in the area of urban mobility in the country, compensating for the lack of sufficient resources in the budgets of most municipalities. These findings are in line with a previous Commission-funded study[268], which determined that EU financial support was important in the areas of mobility management, traffic modelling and sustainable mobility, and that it had a leveraging effect for small and medium cities, which may not be able to implement such projects.

On the other hand, the Court of Auditors expressed certain criticism of how the EU funding for urban mobility has been governed until now, hinting that it can lower its effectiveness: '*EU cities do not have to follow the Commission's guidelines or to have SUMPs, or even a comprehensive national urban transport strategy for urban projects to benefit from EU funding. This is despite the fact that congested urban nodes can seriously hamper the efficiency of the TEN-T network, supported by CEF funds throughout the EU'.* The Court has also noted that the countries with a national legislation in place requiring cities (above certain size) to adopt a SUMP in order to access national and/or national public transport infrastructure[269] have seen a substantial increase in the number of cities adopting their SUMP, or starting a process to adopt it.

The above demonstrates that, even though EU funding for urban mobility is generally perceived as useful and relevant, **its effectiveness may be limited by not linking it (at EU level) to the existence or performance of a SUMP**.

[263] European Court of Auditors (2020). Special Report: Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment.

[264] Information provided by the EIB.

[265] 12 out of 15

[266] 198 out of 207

[267] 44 out of 67 interviewed stakeholders.

[268] EU financial support to sustainable urban mobility and to the use of alternative fuels in EU urban areas (2013).

[269] Italy and Spain

5.2.9. Unintended effects of the Urban Mobility Package

The evaluation did not identify any unintended negative effects of UMP[270]. A small number of indirect positive effects were identified such as the participatory approach employed in the development of the SUMP includes regular cross-departmental meetings what could be introduced in other areas thus increasing effectiveness of processes, allowing for new long standing cooperation mechanisms to emerge.

5.3. Efficiency

This section discusses the efficiency of the Urban Mobility Package, which considers the relationship between the resources used by an intervention (costs) and the changes generated by the intervention (which may be positive or negative).

5.3.1. Main beneficiaries of the Urban Mobility Package

According to the interviewed stakeholders[271], the main beneficiaries have been local authorities, which gained access to more information and knowledge, as well as financial and technical support to realise their activities in the area of urban mobility. According to national authorities that participated in a survey all stakeholder groups benefited to a greater or lesser extent, with national and local authorities being the most prominent beneficiaries. At the end, people living in urban areas were the final beneficiaries of reduced congestion, cleaner air, less noise, more efficient transport etc.

5.3.2. Cost and benefits associated with the implementation of the Urban Mobility Package

5.3.2.1. EU-level costs

The table below presents the main direct costs, associated with the EU measures outlined in the UMP, which have been incurred by the European Commission (not taking into account the regular staff resources costs) in the period since the implementation of the Package in 2013.

Table 1. Costs of the EU UMP measures

Activity	Cost (in EUR)
Urban Mobility Scoreboard	
Technical support related to sustainable urban mobility indicators (SUMI)	1 541 571
Non-binding guidance documents[272]	
Preparation of EU guidance on Urban Vehicle Access Regulations (external study)	160 000
Preparation of EU guidelines on urban logistics (external study)	169 500
Cost related to management of the ELTIS website	
ELTIS II – managing and developing the ELTIS portal and supporting the uptake of SUMPs	1 329 084

[270] However, some measures not included in the UMP but generally associated with sustainable urban mobility, such as eco-driving, could make car use more attractive and thus – somewhat paradoxically – lead to increased congestion, road deaths and CO2 emissions.

[271] Out of those who were able to respond, 13 interviewees noted that this was the case.

[272] It should be clarified that these are studies conducted by Commission services that include some elements of the guidance material.

Activity	Cost (in EUR)
ELTIS web portal management	2 118 037
Cost related to CIVITAS Initiative (Coordination and Support Action under Horizon2020 and FP7)	
CIVITAS WIKI - Coordination and Support Action (CSA) for CIVITAS PLUS II	2 966 656
CIVITAS SATELLITE – CIVITAS 2020 coordination and support action	2 996 859
CIVITAS ELEVATE – CIVITAS 2020 coordination and support action	2 994 375
TOTAL	**14 276 082**

Source: Financial Transparency System of the European Commission

The European Platform on Sustainable Urban Mobility Plans was set up within existing projects and did not require the use of supplementary resources. Additional costs include the travel and subsistence expenses for EGUM members, associated with the attendance at the EGUM meetings, which take place in Brussels, Belgium at least twice a year.

5.3.2.2.Costs borne by Member States and regional authorities

The UMP outlines a set of actions for consideration by Member States. The Package therefore does not require implementation of certain measures and, as such, it does not incur compulsory administrative or compliance costs. However, it is noted that taking these actions entails some administrative costs. The results from the survey targeting national authorities and the interviews with Swedish and Portuguese stakeholders indicate that this has been the case in some Member States.[273] There is evidence that costs are higher when there is not a well-established tradition in urban mobility planning due to the additional costs of training, capacity building and restructuring administrative procedure.[274] Additionally, attending the EGUM meeting also involves administrative expenses.

Due to the non-binding nature of the UMP and the differences between Member States with respect to the institutional settings related to urban mobility issues, it has not been possible to provide an estimate of the costs borne by national and regional authorities.

5.3.2.3.Costs associated with the development and implementation of SUMPs

There are various sources of funding for the development of SUMPs – European, national, regional and local. The costs of developing a SUMP vary significantly depending on the size of the city, the scope of the plan, the level of external assistance involved, and the availability of data and previous studies, with data collection and transport modelling representing the most costly aspects of a SUMP.[275] The identified costs of some of the SUMPs reviewed as part of the case studies in Bulgaria, Sweden and Portugal are presented in Table . The access to information about the costs of developing a SUMP also varied among Member States. It can be especially difficult to determine when a SUMP is developed in-house by a municipality without the employment of external assistance.

[273] 10 out of 13 EGUM members stated that their national authority had incurred costs related to the implementation of some UMP measures.

[274] Study to support an impact assessment of the Urban Mobility Package (2013).

[275] Guidelines for developing and implementing a Sustainable Urban Mobility Plan (2nd edition).

Table 2. SUMP costs (based on the case studies[276])

Case study	Population size	SUMP development cost (in EUR)
Sofia (BG)	1 269 384 inhabitants	257 000
Burgas (BG)	208 915 inhabitants	21 300
Lisbon (PT)	2 400 000 inhabitants	74 950
Braga (PT)	410 000 inhabitants	71 000
Beja (PT)	130 000 inhabitants	49 800
Malmö (SE)	316 588 inhabitants	66 670[277]

Some additional examples were found through desk research. For instance, the SUMP of Athens is estimated to have cost EUR 230 000 and the SUMP of Nicosia EUR 400 000[278]. These values are, with the exception of the SUMPs of Sofia and Athens, lower than the costs provided in the study to support an impact assessment of the UMP presented below:

Table 3. SUMP development costs: Low and high estimates[279]

Size of city agglomeration by number of inhabitants	Low estimate per city (in EUR)	High estimate per city (in EUR)
> 100 000	106 000	614 000
> 250 000	145 000	684 000
> 1 000 000	173 000	687 000

Source: Study to support an impact assessment of the Urban Mobility Package

Apart from the cost of developing the SUMP, there are also other costs, such as producing monitoring reports, establishing citizen engagement strategies, synchronising the plans with regional plans and developing manuals[280].

5.3.3. Efficiency of UMP measures

Based on the evidence collected it was possible to determine to some extent which measures have been efficient or inefficient.

Notably, as the European Platform on Sustainable Urban Mobility Plans was developed within existing EU projects and no additional resources were used to set it up, it is considered to have been an economically efficient UMP measure. Likewise, showcasing best practice on the ELTIS website was also found to have provided technical and operational efficiency. For example, the Belgian case study showed that best practices from ELTIS were used for inspiration by the country's local authorities. Moreover, capacity building activities provided

[276] In the Belgian case study, cities interviewees were not able to provide cost for the development of SUMPs, mainly due to the fact that mobility plans and other related plans are an established approach and have been developed in Belgium for several years.

[277] The SUMP was developed in-house. This value represents an estimate based on the man-hours spent on developing the SUMP and the average hourly rate.

[278] Provision of technical support to the Green Fund for the selection of municipalities and drafting of technical specifications for Sustainable Urban Mobility Plans, CERTH/HIT, 2016.

[279] Depending on the level of integrated urban mobility approach

[280] Guidelines for developing and implementing a Sustainable Urban Mobility Plan (2nd edition).

through projects such as SUMPsUp and Boosting Urban Mobility Plans[281], and participation in events like the European Conference on Sustainable Urban Mobility Plans contributed to an accumulation of knowledge and an exchange of ideas.

Such outcomes have a **leveraging effect and are associated with saving time and resources**. However, it is not possible to provide an estimate of the outcomes in quantitative terms. Desk research also showed that in the absence of a wider consultation and a larger sample of projects, such generalisations should be made with caution[282]. Lastly, the EU funding of urban mobility projects also lead to some indirect benefits, such as a cultivation of local expertise. Notably, the Bulgarian case study showed that the rigorous process set up to apply for and execute ESI-funded urban mobility projects was credited with enhancing the capacities of the local authorities implementing those projects.

Generally, the majority of EGUM members and a large proportion of the interviewed stakeholders[283] indicated that the EU capacity building and financial support had helped save time and resources.

The Court of Auditors pointed to the fact that **some effective and cost-efficient measures, such as urban road tolls/congestion charging (one type of UVARs), were not used too extensively**, referring to the specifics of individual cities[284]. There are other explanations as to why UVARs have not been fully exploited, such as opposition by (part of) the population and or/businesses, low level of political commitment as well as a non-binding EU framework which hasn't managed to sufficiently engage Member States authorities at different levels.

There are also indications of some inefficiencies associated with certain measures of the Package. For instance, a **lack of adequate monitoring and evaluation schemes and external assistance** was shown to feature in the implementation of lower quality SUMPs. Investments made in the development of such SUMPs are therefore not considered to have been efficient from a financial standpoint. For example, the Bulgarian case study shows that all of the SUMPs of Bulgarian cities with the exception of one were developed with funding from European programmes. However, there is limited or no evidence that these SUMPs were implemented, which indicates that the use of EU financial resources was inefficient in this case. In addition, lack of tangible targets may also impact efficiency, assuming that these are related with higher effectiveness of measures included in a SUMP; as observed by the Court of Auditors, '*In several cases, the strategies did not identify any objectives or targets in terms of results or modal share'*.

Consulted stakeholders[285] also provided examples of poorly thought-out or executed urban mobility measures implemented as part of such projects. Similar evidence was presented in the report of the European Court of Auditors[286], which concluded that weaknesses in project design and implementation had led to an inefficient use of EU funding in some instances.

[281] And by other members of the SUMP Platform Coordinating Group (https://www.eltis.org/mobility-plans/european-platform/coordinating-group-members).

[282] EU financial support to sustainable urban mobility and to the use of alternative fuels in EU urban areas (2016).

[283] 13 out of 15 national authorities from the online survey and 41 out of 67 interviewed stakeholders.

[284] See quotation in section 5.2.7

[285] This is an observation that crosscut numerous interview questions and the views provided.

[286] European Court of Auditors (2020). Special Report: Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment.

5.3.4. Extent to which the costs of the UMP as a whole have been justified given the benefits that have been achieved

As most of the consulted stakeholders could not estimate or comment on the resources invested in their cities, it is challenging to assess whether there has been a good return on resources invested in the implementation of the Urban Mobility Package, particularly at Member State level. Based on the information with regard to the (relatively modest) EU resources invested, it can be claimed that these were **justified relative to the identified benefits**. Moreover, relatively few of the consulted stakeholders had an opinion on this and nearly half of the EGUM members who responded to the survey targeting national authorities[287] did not consider that the same results could have been achieved with less funding or at a lower cost.

5.3.5. Room for simplification in order to reduce regulatory burden

Several stakeholders[288] stated that adhering to all of the steps of the SUMP guidelines was quite complex and time-consuming for municipalities; however, it was also acknowledged that urban mobility is a complex issue, which warrants complex solutions. Additionally, representatives of several EU-level organisations[289] noted that there was a large number of initiatives and available resources, which was, at times, difficult to navigate through. It was suggested that there is room for these to be streamlined and for involving the existing city networks and organisations in their promotion.

Some of these concerns – such as the complexity of the process and the challenges that smaller municipalities (in particular) have to follow full SUMP guidelines and steps – are valid. To address it, a summary of the SUMP process for decision makers was published[290] and a dedicated SUMP guidance with simplified procedure that would respond to the needs of smaller towns and cities is in preparation.

5.4. Coherence

1.1.1 **This section discusses the coherence of the UMP, both internally and externally, with other EU interventions. It reviews the evidence collected of where and how other EU interventions linked directly or indirectly to urban mobility are working together (e.g. to achieve common objectives or as complementary actions) and identifies areas where there are tensions or overlaps (e.g. objectives which may be contradictory or inefficient).**

5.4.1. Internal coherence

Two levels of internal consistency are assessed, namely consistency in terms of objectives, and consistency among the measures of the UMP.

The complementarity of the objectives of UMP is confirmed by the evaluation; however, the need for better-defined objectives and greater alignment for reducing overlaps has also been

[287] 7 out of 15 EGUM members stated that the same results could not have been achieved at a lower cost; 1 disagreed and 7 indicated that they did not know.

[288] 8 out 67 interviewees.

[289] 7 out 18 EU level interviewees.

[290] SUMP Summary for decision-makers. Available at: https://www.eltis.org/mobility-plans/sump-summary-decision-makers

underlined by some stakeholders[291]. Overlaps may be identified between resource-efficient clean transport and the urban areas environment protection.

At the level of the UMP measures[292], coherence is assessed through the degree to which the measures operate together to achieve the UMP objectives. In terms of complementarity and synergy, stakeholders[293] positively assess the internal coherence between measures/pillars. In particular, it is recognised that the integrated nature of SUMPs contributes to synergy with other measures. However, the level of coherence might be reduced during implementation of the measures, due to the non-mandatory nature of the UMP and of SUMPs in some EU Member States

Targeted financial support could be further aligned to the UMP pillars and measures. In addition, the lack of a link between EU funding for urban mobility and having the SUMPs in place is another factor reducing the coherence of the UMP; as stated by the Court of Auditors, '*EU cities do not have to follow the Commission's guidelines or to have SUMPs, or even a comprehensive national urban transport strategy for urban projects to benefit from EU funding*'.

5.4.2. External coherence

The assessment of external coherence focuses on the alignment with other policy documents and initiatives, at the European as well as the global level.

Overall, the UMP objectives are found to be generally coherent with other relevant EU-level policies and initiatives. However, due to the UMP being a soft form of governance with measures that are not mandatory, it tends to have impact in a way that complements other actions, such as those based on hard legislation for their implementation, or funding instruments. The UMP emphasises the need for a comprehensive approach overall, based on support for the implementation of EU policies in cities and contributing to capacity building, guidance provision and integrated mobility planning, as well as raising the general profile of urban mobility issues.

The following sub-sections present these linkages between the UMP and the most relevant other EU-level policies/ initiatives.

5.4.2.1. Coherence with National Energy and Climate Plans

The National Energy and Climate Plans (NECPs) are derived from the '**Clean energy for all Europeans**' package[294] that supports the transition towards cleaner energy, in alignment with the EU's commitments under the Paris Agreement. This includes the Regulation on Governance for the Energy Union and Climate Action[295] that states that 10-year national plans

[291] Overall, from those that were able to answer, 10 interviewees noted that the general objectives were not aligned, with 9 of those interviewees adding that they overlap with one another.

[292] The Urban Mobility Package contains four pillars of measures: Sustainable Urban Mobility Plans (SUMPs); Coordinating public and private-sector intervention; Reinforcing EU support; and Involving Member States in the urban mobility field.

[293] For those that were able to answer, 11 interviewees noted that there was alignment between the measures.

[294] https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans_en

[295] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and

should be elaborated, addressing the Energy Union's dimensions of energy security, internal energy market, energy efficiency, decarbonisation, research, innovation and competitiveness. Transport and low-emission mobility are included in some of the dimensions to be addressed, and because of its impact, the need for transport to be at the centre of NECPs is recognised[296]. Clean mobility targets, electromobility, urban planning and investment in alternative fuel infrastructure, effective coordination on the rollout of ITS and taxation restructuring are some of the important topics mentioned in the assessment of the NECPs by the Commission[297].

There is coherence of NECPs and the UMP in terms of objectives. As some interviewees have recognised, there are synergies since mobility measures have been implemented with these plans in mind[298]. So clear complementary areas of intervention can be identified. This was also determined from the case study of Portugal where the Portuguese NECP includes decarbonisation of the national economy (including transport) and sustainable mobility in the national set of objectives. In addition, these plans should also include the calculation of the amount of energy savings, as prescribed in the **Energy Efficiency Directive (EED)**.

Moreover, **National Energy Efficiency Action Plans** under the (revised) Energy Efficiency Directive[299] require indicative national energy efficiency targets and measures to comply with certain cumulative end-use energy savings obligations. As regards the UMP, the above targets and requirements were found to be aligned with the objectives of the UMP. An example of this was found in Portugal where the Energy Efficiency Fund has funded a number of SUMPs, as part of the SUMP measures of its National Energy Efficiency Plan.

5.4.2.2.Coherence with EU environmental policy

The issue of air quality has been part of the European agenda since the 1990s and among the initiatives adopted on the matter are the two **Ambient Air Quality Directives**, with the aim of improving the quality of air and minimising risks and impacts on people's health and the environment. There is strong link between transport policies and air quality policy objectives, especially in light of the impact of transport-related pollutants in areas with high population density, i.e. at urban level. However, some tax incentives might have encouraged the use of private diesel cars[300], negatively impacting air quality and in turn sustainable urban mobility goals. **Air Quality Plans** must be elaborated when the limit values for air pollutant concentrations are exceeded, while the most commonly reported[301] transportation-related measures are modal shift, land-use planning and improvements in public transport. Low emission zones and urban logistics also constitute part of the measures range, corroborating the coherence and complementarity of the Urban Mobility Package.

2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0001.01.ENG&toc=OJ:L:2018:328:FULL

[296] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: United in delivering the Energy Union and Climate Action – Setting the foundations for a successful clean energy transition. COM/2019/285 final. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019DC0285

[297] https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1600328628076&uri=COM:2020:564:FIN

[298] Coherence at this level is for example expressed in the Italian NECP: "…'improve' measures (regarding vehicle efficiency and emissions) must be supplemented with instruments to reduce mobility needs ('avoid' measures) and with efficiency in travel ('shift' measures)…" (Ministry of Economic Development, 2019, p. 9)." Ministry of Economic Development, Ministry of the Environment and Protection of Natural Resources and the Sea, Ministry of Infrastructure and Transport (2019). Integrated National Energy and Climate Plan. Available at: https://ec.europa.eu/energy/sites/ener/files/documents/it_final_necp_main_en.pdf

[299] Directive 2012/27/EU, amended by Directive (EU) 2018/2002.

[300] Available at: https://ec.europa.eu/environment/air/quality/aqd_fitness_check_en.htm

[301] Available at: https://www.eea.europa.eu/themes/air/air-quality-management/improving-europe-s-air-quality/improving-europe-s-air-quality

The 2018 **Clean Air for All** Communication[302] highlights the need for a comprehensive approach across different sectors and levels of governance, and the implementation of effective solutions. Transport is one of the sectors to be addressed and, as mentioned in the Communication, emission reduction measures can for instance address technology, behaviour, demand management or infrastructure. Moreover, the role of UVARs is highlighted, along with the need for their integration with sustainable urban mobility plans, as well as air quality plans, pointing to a high level of coherence.

The 2002 **Environmental Noise Directive**[303] addresses noise pollution, including that induced from traffic, and prescribes that Strategic Noise Maps and Action Plans should be developed by Member States, under certain criteria, as well as legislation and administrative provisions for compliance. Tackling noise pollution belongs to the aims of the SUMP's concept and together with the UMP objectives are coherent with the objectives of the Directive.

5.4.2.3.Coherence with transport and infrastructure EU policy

The UMP is coherent with the **ITS Directive**[304] both in relation to its urban aspect and beyond. Intelligent transport systems were recognised as an important area in the urban mobility field which resulted in a dedicated annex to the UMP. There is also an overall coherence at the level of the objectives between both instruments. The ITS Directive specifically aims to address congestion, rising energy consumption and other environmental issues linked with the increase in volume of road transport. Beyond the ITS domain, the coherence with the smart and digital aspect of the urban policies is ensured in UMP by covering also the **smart cities** initiative.

The 2013 **Clean Power for Transport Communication**[305] noted the need for a comprehensive mix of alternative transport fuels (AFs) in order to minimise oil dependence and mitigate environmental impact of transport, including in urban areas. According to the **Directive on the deployment of alternative fuels infrastructure**[306], Member States should adopt a **National Policy Framework** (NPF)[307] for the development of the markets as regards alternative fuels in the transport sector and the deployment of the relevant infrastructure and to notify them to the European Commission by 18 November 2016. The Commission assessed the NPFs in terms of their relevance, effectiveness and coherence as part of the Clean Mobility Package in 2017, noting that the NPFs on average do not create the ambition needed for alternative fuels infrastructure roll-out. Therefore, the Commission adopted also an **Action Plan on Alternative Fuels Infrastructure**[308] to help accelerate rollout of infrastructure,

[302] COM(2018)330/F1. A Europe that protects: Clean air for all. Available at: https://ec.europa.eu/transparency/regdoc/?fuseaction=list&n=10&adv=0&coteId=1&year=2018&number=330&version=F&dateFrom=&dateTo=&serviceId=&documentType=&title=&titleLanguage=&titleSearch=EXACT&sortBy=NUMBER

[303] Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise – Declaration by the Commission in the Conciliation Committee on the Directive relating to the assessment and management of environmental noise. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32002L0049

[304] Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0040

[305] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Clean Power for Transport: A European alternative fuels strategy COM(2013) 17. Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0017:FIN:EN:PDF

[306] Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure. Available at: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32014L0094

[307] Regulatory Framework for electricity, compressed natural gas (CNG), liquefied natural gas (LNG) and hydrogen.

[308] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2017:0652:FIN

including through increased funding under the Connecting Europe Facility. It also listed a number of relevant targets and measures at the national level with the aim to increase EU energy security supply, contribute to transport CO_2 emissions reduction, improve air quality and strengthen EU competitiveness and jobs. In 2019 the Commission published an update of the NPF assessment taking into account those NPFs that had not been submitted by Member States in time for the first assessment of NPFs[309]. Member States had to send to the Commission their first national implementation reports under this Directive by 18 November 2019. The Commission published its assessment[310] of the national implementation reports on xxxx February 2021 [exact date to be filled in when known].

The majority of the UMP objectives and areas are coherent with the above, and synergies can be identified in terms of urban planning, operations, regulation and innovation to complement possible low impacts. Specifically, the Action Plan on Alternative Fuels Infrastructure refers to SUMPs in the section on enabling action in urban areas.

The revised 2009 **Clean Vehicles Directive**[311] for the promotion of clean and energy-efficient road transport vehicles via public procurement tenders was also found to be coherent with the UMP and vice versa at the level of the objectives. In addition, most of the actions in the scope of the Directive concern urban areas.

The 2016 **Low-emission Mobility Strategy**[312] supported by an Action Plan and linked to funding from existing sources, aimed at the support of the competitiveness and mobility needs, and achieved through the low-carbon, circular economy envisaged for Europe.[313] The UMP objectives are coherent with this framework and, especially as far as SUMPs are concerned, their help in addressing urban mobility complexity and stimulation of modal shift towards cleaner and sustainable transport modes is recognised as supportive to the strategy[314].

Additionally, it is recognised that the promotion of energy efficient transport modes in the **Trans-European Transport Network** also contributes towards low emission mobility and energy transition[315]. The **TEN-T** aims at strengthening cohesion, resource and cost efficiency, sustainability and increased user benefits through a single European transport area that supports inclusive growth. The concepts of accessibility, integration, interoperability, mobility needs, and low-carbon transport are pivotal and jointly shared with the UMP,

[309] Commission Staff Working Document: Report on the Assessment of the Member States National Policy Frameworks for the development of the market as regards alternative fuels in the transport sector and the deployment of the relevant infrastructure pursuant to Article 10(2) of Directive 2014/94/EU. Available at: https://ec.europa.eu/transparency/regdoc/?fuseaction=list&coteId=10102&year=2019&number=29&version=ALL&language=en

[310] The assessment shows an increase in efforts of Member States, but overall shortcomings in ensuring a rollout of infrastructure that would lead to even network coverage throughout the whole Union and at scale that is considered necessary to meet the ambition of increasing the overall greenhouse gas emission reduction target for 2030 from 40 to at least 55%, as proposed by the Commission under its Climate Target Plan.

[311] Directive 2009/33/EC, amended by Directive (EU) 2019/1161.

[312] COM(2016) 501, A European Strategy for Low-Emission Mobility. Available at: https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-501-EN-F1-1.PDF

[313] The strategy is structured upon three main areas of action: the optimisation and improvement of transport efficiency (digital/C-ITS, fair and efficient pricing and multimodal solutions), low-emission alternative energy (effective framework, infrastructure, interoperability and standardisation) and zero-emission vehicles (vehicle testing, post-2020 strategy for different vehicle types).

[314] Commission Staff Working Document. Accompanying the document: A European Strategy for Low-Emission Mobility. SWD(2016) 244. Available at: https://ec.europa.eu/transparency/regdoc/?fuseaction=list&coteId=10102&year=2016&number=244&version=ALL&language=en

[315] European Commission (2018). Support study for an impact assessment on measures for the streamlining of TEN-T. Available at: https://ec.europa.eu/transport/sites/transport/files/studies/2018-09-19-support-study-ia-measures-streamlining-ten-t.pdf

especially in the context of urban nodes. Thus, the urban nodes' component establishes coherence at three policy levels, namely between low emission strategy, the TEN-T and the UMP.

As mentioned in Section 2, **Europe on the Move** (2017) is an initiative that consists of a three-part Mobility Package aimed at promoting progress towards clean, competitive, connected and socially fair mobility by 2025, through legislative initiatives and strategic guidance. As part of this initiative, the **EU Road Safety Policy Framework 2021-2030** and accompanying **Strategic Action Plan on Road Safety**[316] was adopted in 2018 and fleshed out further in 2019[317], in alignment with the EU's long-term 'Vision Zero'. A safe system approach for safety in road infrastructure, vehicles and road use, supported by an initial set of key performance indicators (KPIs), constitutes a framework with direct coherence with the urban road safety and the urban ITS components of the UMP. The KPIs could contribute to SUMPs as streamlined tools for the diagnosis, planning, monitoring and evaluation of urban mobility. A number of actors have called on the EU to establish specific targets for urban road safety[318].

An integrated consideration of urban road safety, urban ITS and urban logistics, along with urban management (including UVARs), will avoid inconsistencies and duplications.

5.4.2.4. Coherence with digital EU policy

Besides the ITS Directive, the digital regulatory and policy framework developed since 2013 has been increasingly relevant for UMP. This concerns in particular (1) information society services (for example ride-hailing platforms or mobility-as-service platforms) and (2) data sharing in the field of urban mobility.

For the former, there have been court cases clarifying if services are to be considered information society services in accordance with the e-commerce Directive[319] or transport services. Relevant legislative initiatives are the Regulation (EU) 2019/1150 "on promoting fairness and transparency for business users of online intermediation services", which applies since 12 July 2020, and one proposal, the Digital Markets Act[320], was adopted on 15 December 2020.

For the latter, the **European strategy for data**[321] is of relevance. The strategy announces a number of measures to be proposed in the coming years, with some of them – such as a legislative framework for the **governance of common European data spaces**[322] and the common European mobility data space – to cover also the urban mobility field. The sourcing of data is important and will increasingly impact on this aspect of urban mobility; however, it

[316] COM/2018/293 final. On The Move: Sustainable Mobility for Europe: safe, connected, and clean.

[317] SWD(2019) 283.

[318] E.g. the European Federation of Road Traffic Victims (FEVR) called for adopting Vision Zero goal of reducing the number of road crash victims towards zero by 2030 in built up areas in the EU. More information: https://fevr.org/0by30/

[319] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'). Available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32000L0031

[320] https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en

[321] Commission Communication: A European strategy for data, COM(2020)66 final. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593073685620&uri=CELEX%3A52020DC0066

[322] Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European data governance (Data Governance Act) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CONSIL:ST_13351_2020_INIT

alone is not sufficient e.g. to monitor progress towards reaching sustainable urban mobility objectives[323].

In conclusion, the EU digital policy is an area being intensively and rapidly developing, therefore it is not possible to state that UMP is coherent with it, beyond the coherence with the ITS Directive. It will only rise in importance and relevance for urban mobility, in particular when it comes to the impact of online platforms, indicating the need to ensure more coherence between these two policies in the future.

5.4.2.5.Coherence with social and employment EU policy

Sustainable urban mobility and urban development are inherently interlinked. The vision of the **New Urban Agenda**[324] for sustainable urban development, as agreed upon in the UN Habitat III Conference in December 2016[325], presents a new recognition of the correlation between good urbanization and development, job creation, livelihood opportunities, and improved quality of life. It is structured upon the principles of "leaving no one behind", the concept of sustainable and inclusive urban economies and environmental sustainability. Safe, age and gender-responsive, affordable, accessible, resource-efficient and sustainable urban mobility is called for, which is also aligned with the UMP objectives. Amongst the principles and commitments the UN aims to ensure sustainable and inclusive urban economies by (…) promoting full and productive employment and decent work for all, by ensuring the creation of decent jobs. These principles would need to be better included into the future urban mobility policies developed by the EU and Member States.

As specified in its Gender Equality Strategy 2020-2025[326], the Commission will integrate a **gender perspective** in all its initiatives. As urban mobility planning and urban development can affect women much differently from men[327], a specific gender dimension needs to be taken into account. Participatory approach and taking into account the needs of all stakeholders and citizens is among the SUMP principles since the beginning[328], with the explicit gender dimension addressed in the dedicated SUMP topic guide published in 2020: *Addressing gender equity and vulnerable groups in SUMPs*[329].

Similarly, the **Urban Agenda for the EU** also addresses urban development in an integrated manner. As mentioned in Section 2, the Urban Mobility Partnership was established as part of the Urban Agenda and its **Action Plan** proposes actions related to governance, sustainable urban mobility planning, active mobility, urban vehicle access regulations, accessibility to public transport, clean buses, innovative mobility services, and behavioural change, all of which are aligned with the UMP. Coherence was also found with the EU regional development policy, with urban mobility being part of the investment priorities portfolio under sustainable urban development.

[323] In order to do this, urban mobility indicators are necessary.

[324] http://habitat3.org/wp-content/uploads/NUA-English.pdf

[325] See United Nations Conference on Housing and Sustainable Urban Development.

[326] COM(2020)152 final

[327] Women and men have very different needs and restrictions when using transport which have to be considered in order to adequately meet the demand of all users. It is also needed to ensure that transport is efficient and sustainable, as well as safe for women to use, notably as women rely more on public transport than men.

[328] A Concept For Sustainable Urban Mobility Plans, COM(2013) 913 final. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:82155e82-67ca-11e3-a7e4-01aa75ed71a1.0011.02/DOC_4&format=PDF

[329] Available at : https://www.eltis.org/sites/default/files/sump_topic-guide_gender-equity_vulnerable-groups_final.pdf

The **European Pillar of Social Rights**[330], proclaimed by the EU institutions in November 2017, is about delivering new and more effective rights for citizens. It builds upon 20 principles in the areas of equal opportunities and labour market access, fair working conditions, and social protection and inclusion. The principle 20 stresses the right of everyone to access essential services of good quality, including transport. Evidence from interviews highlighted the need for the UMP to address more employment and social issues, such as fair working conditions, inclusion of impoverished groups (that cannot afford available modes of transportation) and the needs of persons with disabilities or reduced mobility, including barrier-free accessibility, fairness checks, as well as gender and minority group issues.

With its Communication of 14 January 2020 on a **'Strong Social Europe for Just Transitions'**, the Commission reaffirmed that climate change and environmental degradation will require the EU to adapt its economy, create new businesses, new jobs and triggering more investment, with the aim to upwards convergence, social fairness and shared prosperity[331].

Within the area of human health, the implications on and interactions of **health policy** with other policy is recognised at the global level[332]. The EU Health Strategy for 2008-2013, as depicted in the respective 2007 White Paper[333], aimed at fostering good health for the aging population, protecting citizens from health threats and supporting dynamic health systems, through new technologies and tackling health inequalities.

The linkage between the European Commission's **physical activity, sports and urban mobility** agenda is also acknowledged[334]. It is more explicitly expressed in the 2008 EU Physical Activity Guidelines[335] and the Commission Recommendations[336] of 2013 on promoting health-enhancing physical activity across sectors. In particular, the guidelines[337] include environment, urban planning and public safety in the thematic areas addressed, with appropriate transportation infrastructure and services being central to the opportunity for physical activity. Furthermore, coordination between EC services (DGs EAC and MOVE) led to the European Week of Sport campaign running alongside European Mobility Week, so that towns and cities can run activities for both campaigns in parallel and benefit from complementarities. Finally, the European Committee of the Regions also highlights that healthy cities require coherent urban planning, including mobility and transport, environment and healthy diet, sport, physical activity and education, and, finally, governance. Thus, the objectives of the Urban Mobility Package are coherent with the objectives and strategies of the EU health policy, as well as national and local-level initiatives[338].

[330] COM(2017) 250 final

[331] The Commission will present the Action Plan to implement the European Pillar of Social Rights to be endorsed by the other EU institutions at a Social Summit in Porto in May 2021.

[332] https://www.oxfordbibliographies.com/view/document/obo-9780199756797/obo-9780199756797-0163.xml

[333] COM(2007) 630.

[334] COM (2007) 630: White paper – Together for Health: A Strategic Approach for the EU 2008-2013 {SEC(2007) 1374} {SEC(2007) 1375} {SEC(2007) 1376}. Available at: https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=SEC:2007:1376:FIN

[335] Available at: https://ec.europa.eu/assets/eac/sport/library/policy_documents/eu-physical-activity-guidelines-2008_en.pdf

[336] Council Recommendation of 26 November 2013 on promoting health-enhancing physical activity across sectors (2013/C 354/01). Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:354:0001:0005:EN:PDF

[337] Available at: https://eacea.ec.europa.eu/sites/eacea-site/files/study_implementation_pa_guidelines_2016.pdf

[338] For example, Portugal's National Plan for physical activity promotion or the Lisbon Plan on health development, quality of life and well-being

5.4.2.6. Coherence with the principles of the EU single market

The UMP is, overall, **deemed to be coherent with the EU single market rules, with the exception of certain aspects of implementation of the UVAR schemes**. An increasing number and heterogeneity of UVARs could lead to negative consequences, in particular when various schemes are implemented in different ways and combined with a lack of information about how to comply with their rules. In result, there is often a tension between full recognition of subsidiarity (e.g. the rights of local authorities to ensure important societal goals such as clean air) and the need to address the integrity of a single market.[339] The analysis of the current practice of UVARs, observations communicated to the Commission over the past years by citizens, businesses and stakeholder associations as well as questions from Members of the European Parliament[340] point to numerous challenges, some of which may be in conflict the EU single market principles. These include:

- *lack of transparency and insufficient availability of accurate and up-to-date information*: drivers do not always find clear information about UVARs in advance of a trip or in real-time and, therefore, it can be difficult to know if a vehicle is allowed to access a city; in addition, the consequences of not respecting rules in force are not clear enough, including the enforcement of penalties/fines.
- *different treatment of domestic and foreign vehicles*: for example, vehicles with foreign license plates have to be registered in advance, or within a certain timeframe to access, while national vehicles do not have to do so.
- *non-proportionate treatment*: drivers may perceive UVARs as disproportionate and even curbing mobility, when alternative mobility solutions are perceived to be less attractive or insufficient.
- while usually not an issue for local drivers, it can be difficult for other drivers, in particular from different countries, *to understand the rules and be aware of complementary information*[341].

These challenges could partly be linked with the decision the Commission made in 2013 to proceed with a non-binding policy option (and thus proposing the UMP in a form of a Communication), resulting in a lack of harmonisation at the EU level of the UVAR principles.

5.4.2.7.Coherence with funding and financing mechanisms for urban mobility

Coherence between the UMP and the major European funding/financing mechanisms was investigated[342]. Based on the objectives of the 2011 White Paper[343], the TEN-T guidelines identify the TEN-T infrastructure, designated as projects of common interest that create a single, efficient and sustainable European transport that increases the benefits for its users and supports inclusive growth[344]. The **Connecting Europe Facility (CEF)**[345] constitutes the

[339]All policies or regulations adopted at national and local levels of governance need to be in line with the basic principles of the Treaties, such as the ones related to the Single Market, e.g. freedom of movement of persons, goods and services, as well as equal treatment, non-discrimination, proportionality and transparency.

[340] The references are the following: E-00853/2016, E-6990/2017, E-001693/2017, E-005561/2017, E-5106/2017, E-006194/2017, E-005620/2017, E-1271/2017 ,E-5152/2017, E-005116/2017, E-006258/2017, E-6194/2017, E-000885/2018, E-4124/2018, E-5067/2018, E-4862/2018, E-2133/2018, E-000678/2019, E-001060/2019, E-00497/2019, E-001505/2019, E-001645/2019, E-3109/2019. The full list of all questions together with the corresponding answers are public and can be found on the website of the European Parliament: http://www.europarl.europa.eu/plenary/en/parliamentary-questions.html.

[341] On the spot, drivers may struggle with the information displayed on road signs, not least because of language issues; moreover, even when drivers notice and understand the road signs for an UVAR, lack of harmonisation amongst these raises difficulties for interpretation.

[342] Available at: https://www.eltis.org/sites/default/files/funding_and_financing_options_for_sustainable_urban_mobility.pdf

[343] White Paper Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. COM/2011/0144 final.

[344] Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU.

financial instrument of the Trans-European Networks in the transport, telecommunications and energy sectors. Urban nodes are one of the structural components of the TEN-T network and promotion of sustainable urban mobility (passengers and freight) is also an objective, besides their integration with the TEN-T network. A number of urban mobility projects have been co-funded by CEF, while synergies with energy and telecommunications are ensured through joint calls and initiatives. Thus, coherence between the objectives of UMP and CEF can be confirmed.

The **European Structural and investment Funds** also support EU's strategy for smart, sustainable and inclusive growth, through the lens of territorial cohesion. According to the Common Provisions Regulation[346], the European Regional Development Fund (ERDF) and the Cohesion Fund, interventions should be planned in close cooperation with the support provided from the CEF to ensure complementarity, avoid duplication of efforts and ensure optimal linkage of different types of infrastructure. The ERDF prioritises investment towards, among others, low-carbon economy, climate change adaptation, environmental protection, resource efficiency, sustainable transport and bottleneck removal, all of relevance for urban mobility. Many projects related to urban mobility has been co-funded through ESI funds. Thus, there is coherence between the objectives of the UMP and ESI funds.

The European Investment Bank (EIB) is also an important financing source for urban mobility initiatives and projects[347]. The EIB is also responsible for managing the guarantee programme European Fund for Strategic Investments (EFSI), which supports the investment plan for Europe and also includes projects in the sustainable urban mobility realm. In relation to SUMPs, the EIB ensures that the plans are properly invested and that there is coherence between SUMPs and city plans in project proposals.

Other funding mechanisms for sustainable urban mobility are the **Horizon 2020, Interreg** and **LIFE programmes.** These programmes and initiatives provide opportunities for research, development and innovation, as well as resources for pilot testing, addressing different dimensions of urban mobility transport. Horizon 2020 and Interreg, in particular, have had, and still have projects that include a number of SUMPs or SUMP capacity-building activities. These projects are represented and discussed at the SUMP Platform Coordinating Group (together with other SUMP-related projects), which holds two coordination meetings per year, with ensuring consistency being one of the objectives.

Thus, there is overall coherence between the objectives of the UMP and the aforementioned funding/financing instruments. However – as observed by the Court of Auditors and described in particular in sections 5.2.2., 5.2.6., 5.2.8. and 5.3.3. – the fact that EU funding isn't sufficiently linked to SUMPs (as the most important measure of UMP) limits their effectiveness and quality assurance.

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[345] Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010.

[346] Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.

[347] The EIB operates on the basis of six priority areas, namely: climate and the environment, development, innovation and skills, small businesses, infrastructure and cohesion, and it provides financing for projects that are green, innovative, efficient, safe, secure, inclusive and accessible Available at: https://www.eib.org/en/projects/sectors/transport/index.htm

5.4.2.8. Synthesis of findings on the external coherence of the UMP

The results of the analysis point to **strong coherence between UMP and other EU policies and initiatives, in terms of objectives and vision**, towards the transition to a new era of sustainable development, where sustainable urban mobility and transport are key. The national authorities' survey and the interviews support these findings to a large degree. EGUM members reported complementarity and coherence with the majority of these instruments, while interviewed stakeholders[348] noted a perceived coherence with different degrees of strength between sustainable urban mobility and almost all topics of EU policies. However, the practicalities of implementation of many different UVAR schemes across the EU pose some risks to the internal market principles.

Synergies between the European Mobility Week, EU Green Week and energy/climate-related organisations were highlighted as a coherent approach moving forward due to the different target groups. Finally, in line with coherence with health policy, as described earlier, the EU Week of Sports also includes some actions promoting walking and cycling (e.g. Bike or Walk to School in Belgium or the National Community Walking Day in Ireland, etc.[349]).

However, when it comes to employment and social policies, the commitments at international (2016 New Urban Agenda for sustainable urban development) and EU (2017 European Pillar of Social Rights) levels are post-UMP developments which will be considered in the future EU initiatives on urban mobility.

5.5. EU Added Value

An assessment of EU added value principally looks at the value resulting from EU intervention that is additional to the value that would have resulted from interventions initiated at other levels of governance (i.e. national level) and from the private sector.

Overall EU added value

Even though there is lack of available quantitative data to note any significant improvements in the area of urban mobility in Europe, the general consensus from stakeholder consultation indicates that **EU intervention is required to address the problems related to urban mobility**. This supports the conclusion that there has been added value from the UMP intervention. Moreover, the Court of Auditors in its report is also positive overall about it, and its recommendations point to the need to reinforce the EU intervention in urban mobility in particular by proposing clear legal obligations for Member States.

As mentioned, the thematic linkages with a number of other EU legislations add to the complication of specifically pinpointing where the UMP has added value compared to the specific legislative acts in related areas.

5.5.1. Evidence of direct EU added value

Overall the evidence for this is mixed. There is some evidence that, although non-binding, the UMP has contributed directly to sustainable urban mobility and added value at the local level. The examples provided in Section 5.2.2, as well as improvements in other cities, such as

[348] This was perceived by 12 interviewed stakeholders.

[349] https://ec.europa.eu/sport/sites/sport/files/events_for_website.pdf. In addition, there have been a series of coordination/information meetings between relevant staff of different DGs running EU city awards and, to a lesser extent, EU Weeks.

Bremen, Ghent, Gdynia, Funchal, Szeged, Vitoria-Gasteiz, Bologna, Murcia, Kraków, Utrecht, Stockholm, Umea or Lisbon, would seem to support this. The majority of these cities have won EU SUMP and/or CIVITAS Awards[350].

However, the analysis performed in the support study indicates that the trends in key variables of transport volumes, modal shares, emissions and road safety have not significantly changed since 2013 with the introduction of the UMP. For example, between 2010 and 2020 there has not been a consistent and noticeable change across the EU in modal shares of more sustainable transport modes.

It should be noted, however, that there is no guarantee that UMP measures have contributed or will contribute automatically to sustainable mobility. As the analysis of the state of implementation outlined, the significant variation in the degree to which the UMP measures have been implemented at Member State level is evidence of this. Thus, while added value from the intervention of the UMP can be observed in some specific cities, the **effects are not widespread.**

In addition, it may well be that it is other pieces of EU legislation operating in tandem with the UMP that have had the more tangible effects due to their characteristics as hard forms of legislation and binding measures. This is particularly the case of the Ambient Air Quality Directives, the Clean Vehicles Directive and the Intelligent Transport Systems Directive.

5.5.2. Evidence of indirect EU added value

The analysis uncovered **numerous cases of where the UMP had a more indirect impact**. This impact is primarily seen across the majority of stakeholders[351] through supporting awareness-raising capacity building, sharing of good practice and experience, and fostering collaboration and cooperation. Views from the public consultation are an example of this where 95% of respondents answered that the EU should continue to support the sharing of experience, promote best practice and foster cooperation. In addition, an overarching view from stakeholders was the role of the UMP in providing a common narrative and streamlining EU efforts in the area of urban mobility.

In particular, at the local level, interviewed stakeholders[352] stated that the **sharing of experience and good practice, the guidelines for SUMP development and monitoring, and EU-level funding** linked to urban mobility projects were the prime areas where the intervention of the UMP provided added value. At the national level, evidence from the national authorities' survey and their interviews highlighted that the proposed approaches, tools and frameworks put forward through the UMP help in working towards sustainable mobility and were seen as being very valuable. Moreover, the SUMP Guidelines place a strong emphasis on involving citizens and stakeholders, as one of the eight main principles[353], and the 1st SUMP Award focused on citizen and stakeholder participation[354]; this is in line with the objectives of EU being closer to citizens and better regulation.

At the EU level, stakeholders[355] also noted several examples of where the UMP provided more intangible forms of added value. This included the **benefits of SUMP guidance** as well

[350] More information: https://www.eltis.org/mobility-plans/project-partners/sump-award; https://civitas.eu/awards

[351] Combining all of these areas together, it was noted by 40 out of 67 interviewed stakeholders

[352] Overall, 9 out of 19 interviewees at the local level were of the view that these areas provided added value.

[353] https://www.eltis.org/mobility-plans/sump-concept

[354] https://mobilityweek.eu/sump-award

[355] 8 out of 18 of the EU level interviewees.

as other forms of guidance material where the UMP has been able to compliment and strengthen national level approaches and frameworks.

In assessing the views geographically, it was found that the majority of responding stakeholders[356] in Eastern European countries had a rather positive opinion on the added value of the Urban Mobility Package. This was compared to a number of regional and local-level stakeholders in Western Europe who were more cautious - in particular, they noted that it was often the case that the national frameworks for sustainable urban mobility that had been developed prior to the UMP or with only marginal support from the UMP were more valuable in addressing country-specific urban mobility challenges.

In addition, it was noted that while the sharing of good practice and experience between cities are considered important, their wider tangible impacts are limited. An example of this was through the **ELTIS platform**. While it provides information for many cities, national and regional level stakeholders[357] were of the view that the information provided by ELTIS was often not reliable enough for sound evaluations and projects. It was therefore suggested that the platform should also pay more attention to learning from unsuccessful practices to avoid future mistakes.

5.5.3. The impact of EU-level funding on the added value of the UMP

From the benefits that have been outlined above, the overwhelming majority of stakeholders[358], predominantly at the local and regional levels, stated **the added value of the UMP with respect to EU level funding as very or moderately important**. For many stakeholders[359] and vast majority[360] of people participating in the public consultation the EU funding has been very important and without it, progress towards a more sustainable mobility would be significantly impeded. This was also discussed in the European Court of Auditors report[215] which highlighted the importance of EU funding.

From the targeted interviews, added value from the UMP through the form of targeted financial support was found to be more prevalent among local stakeholders[361]. This was confirmed in the case studies where a number of interviewees (e.g. from Bulgaria and Portugal) noted how **EU-level funding in urban mobility projects not only assisted in their development but were also seen as being necessary**.

In spite of this, evidence collected through the case studies and the state of play found additional examples of where EU-level funding was not required to achieve sustainable forms of urban mobility. One observation was that authorities at local or national level can sometimes look to access EU funding to solve short-term issues. This notion can carry the risk of limiting the longer-term visions that the UMP aspires to tackle, such as targets on emissions, improving air quality and encouraging the uptake of more sustainable modes of transport. Thus, the added value of the UMP can sometimes be seen only in the context of achieving short-term rather than long-term goals.

[356] This is an observation that crosscut numerous interview questions; thus, it is an overall assessment of the views that were provided. To provide an indication, 11 interviews were conducted from Bulgaria, and 13 participants from the Public consultation represented those from Eastern European countries.

[357] This view was held by 14 out of 22 interviewees at the national and regional levels.

[358] 198 out of 207 stating it was very or moderately important

[359] 25 out of 68 interviewees.

[360] 169 out of 207 participants in the public consultation stated that targeted funding from the EU is very important.

[361] This was noted by 10 out of 19 interviewees at the local level (including all stakeholders from Bulgaria).

Some **examples of low-cost sustainable urban mobility initiatives** were found in cities such as Ghent and Lisbon. For example, Ghent introduced a new circulation plan in the city in 2017 that reduced the access for cars and reallocated the space to other forms of mobility. As a result, in 3 years, the modal share of private cars was down from 40% to 33% with a shift towards the more sustainable modes of transport[362] EU funding was also involved, as Ghent was awarded almost €3.5 million from ERDF under Urban Innovative Actions to develop and implement a Traffic Management as a Service concept in order to monitor and manage traffic for all transport modes[363].

5.5.4. The need for EU intervention

Overall, **a large proportion of stakeholders stated that there is a need for continued action on urban mobility at EU level**. At the overarching level, responses from the targeted survey noted that continued action at EU level is necessary to ensure that negative urban mobility trends are avoided and addressed[364]. In addition, responses to the public consultation uncovered strong support for the EU to intervene with urban mobility at the local level, with 78% being in agreement. These views were also found in the targeted interviews, which provided more detailed examples of where there would be added value from continued EU-level support.

At the local level, interviewees noted that EU-level action is required because most of the challenges in urban mobility stem from the local level rather than at national and regional levels. The needs of local stakeholders were therefore seen to have been taken into account and raised to a higher level (EU level) thus providing more legitimacy to their needs and challenges. Other views included this point, together with the view that an increase in EU-level action through the UMP would increase the benefits for both local and regional stakeholders. One pertinent example was from a local authority in Sweden, which noted that it can often be easier to work towards EU-level guidelines and objectives compared to those at national level, specifically over the need for more forms of efficient transport.

As mentioned before, responses from the national authorities' survey uncovered a general view that there is a need for continued EU-level action through interventions such as the UMP. Similar themes were uncovered at the local level.

The vast majority of EU-level stakeholders[365] also noted the need for EU support. **EU support for research and innovation, best practice sharing, funding and financing, cooperation and knowledge exchange was seen as being invaluable**. These exchanges were raised as having a proven, powerful effect on urban mobility policy development, and should be continued by EU-level action through interventions such as the UMP.

Finally, the conclusions and recommendations by the **Court of Auditors support the need for EU intervention**. Moreover, the Court requests that the intervention is strengthened by putting some legislative obligations for Member States (in relation to urban mobility data and adoption of SUMPs) and linking EU funding to SUMPs.

[362] Transport and Mobility Leuven, Assessment of Gent's traffic circulation plan. Available at: https://www.tmleuven.be/en/project/circulatieplangent

[363] https://www.uia-initiative.eu/en/uia-cities/ghent

[364] 12 out of 15 EGUM members were of this view.

[365] It was mentioned by 14 out 18 EU level interviewees.

5.5.5. Implications of withdrawing the existing EU intervention

Although the UMP measures have the potential to contribute in a significant way to more sustainable forms of urban mobility, their impact is not clearly visible on an EU-wide scale. There is also limited evidence that the UMP contributed to a further uptake of sustainable and efficient mobility measures, as they were often implemented before the launch of the UMP in 2013 through various other policies and initiatives at the EU and national levels.

Stakeholder consultation showed that the **majority of stakeholders[366] were of the view that withdrawing the UMP would result in negative consequences**. National authorities were of the view that withdrawing EU support would lead to a slower implementation of public mobility projects due to the absence of EU-level funding and support provided following the adoption of the UMP. This is supported by evidence from the targeted interviews where a number of stakeholders responded that it would result in slower implementation, fewer exchanges of best practice and slower levels of innovation. Finally, an overwhelming majority[367] of those participating in the public consultation indicated that the EU should continue its involvement in the urban mobility field.

6. CONCLUSIONS

6.1. Conclusion 1: Action on sustainable urban mobility is still urgently needed to achieve ambitious climate and environmental targets and commitments

The Urban Mobility Package aimed to facilitate the achievement of the objectives set out in the 2011 White Paper (specifically in creating sustainable transport systems and cutting GHG emissions by at least 60% by 2050 with respect to 1990 levels). However, the current trends in urban transport do not indicate a significant improvement in terms of modal share, traffic volume and greenhouse gas emissions. In particular, it was found that the different urban transport modes remain stable over time, with conventionally fuelled private cars still dominating and only a slight increase in public transport use and non-motorised modes of transport.

In consequence, CO_2 emissions from urban transport have remained at a similar level between 2010 and 2020, which illustrates how much remains to be done. The pertinence of this issue is further emphasised by the European Green Deal, which sets the goal of a climate neutral continent by 2050 along with the specific objective of a 90% reduction of greenhouse gas emissions in transport by 2050, and by the 2030 Climate Target Plan proposal to cut greenhouse gas emissions by at least 55% by 2030, as well as by the overall vision of the Sustainable and Smart Mobility Strategy including the milestone to have 100 European climate neutral and smart cities by 2030. Similarly, air quality in urban areas remains to be a big challenge, with continued non-compliance with EU air quality standards in the majority of EU Member States and, especially, concentrations of NO_2 and PM_{10} still exceeding EU limit values. The envisaged increased EU ambition and action in that regard[368] further reinforces the necessity to act on urban transport emissions.

Moreover, it was confirmed that the practicalities of implementing sustainable urban mobility planning and related measures across all levels of governance are still faced with difficulties

[366] 12 out of 15 national authorities answered that withdrawing from the EU would slow implementation and innovation of public mobility projects.

[367] 163 out of 207 participants to the public consultation answered that they somewhat/fully disagree that the EU should not interfere with urban mobility.

[368] Zero pollution action plan, planned for 2021. More information: https://ec.europa.eu/environment/strategy/zero-pollution-action-plan_en

and challenges. This, coupled with very divergent national approaches, including support (or lack of thereof) to cities, prevents the necessary step-change envisaged in 2013 in line with the preferred (non-binding) policy option chosen[369].

In consequence, the expected UMP results of reduction of CO2 and air pollutant emissions, less congestion and road casualties at urban level have not consistently materialised across the EU, with persisting negative consequences, including for the smooth functioning of the TEN-T network. In addition, it is very unlikely that the intervention in its current form will enable the achievement of more ambitious EU objectives in relation to decarbonisation, linked with increasingly serious climate and environmental problems, and digitalisation. Therefore, EU action on sustainable urban mobility is still needed, even more now than in 2013.

6.2. Conclusion 2: The UMP has made some contribution towards its original objectives, but there is a need to update them

It was not possible to establish that the Urban Mobility Package has entirely fulfilled the expectation to support cities in their transition towards sustainable urban mobility relative to its original objectives. There are signs of improvement, but the degree to which these trends were affected by the Urban Mobility Package is difficult to determine due to the fact that the Package is a non-binding document and overlaps thematically with other EU legislation[370].

Nonetheless, it is important to note that the Urban Mobility Package has had a more intangible, indirect impact by supporting awareness-raising, capacity building, sharing of good practice and experience, and fostering collaboration and cooperation. It is also noteworthy that the Package has provided a common narrative and streamlined the EU's efforts in the area of urban mobility. Even though over six years have passed since its adoption, the shift towards more sustainable urban mobility is a long-term and ongoing process, and tangible results are expected to take longer to materialise.

But the problems in the area of urban mobility remain similar in 2020 as in 2013, leading to similar negative consequences, and some of these consequences are of rising severity and gravity for society, the economy and the environment. This concerns in particular the accelerating tempo of climate change. This has already been acknowledged at the EU level with the increasingly ambitious objectives of the European Green Deal, the Climate Target Plan 2030 and the Sustainable and Smart Mobility Strategy. In addition, the Strategy also underlines the challenges with regard to the resilience of urban transport networks, which has been severely tested during the COVID pandemic, as well as the persisting challenges linked to tackling congestion and road casualties. These needs are linked with ensuring important societal and employment goals, if transport is to remain affordable for all users (including vulnerable groups) and to prevent connectivity loss for persons in peripheral and remote areas, indicating a necessity for a reinforced integration of employment and social aspects in the area of urban mobility.

Further action is also required to better accommodate fast moving new developments and needs in the area of urban mobility (e.g. e-mobility, Mobility-as-a-Service, mobility management, connectivity with peri-urban and rural areas) as well as to better capture societal

[369] Description of all analysed policy options is provided in section 2.2.

2.Mandatory development of SUMPs by Member States-defined urban areas (minimum policy and governance framework);

3.Mandatory development of SUMPs by EU-defined urban areas (minimum policy and governance framework).

[370] In particular, it could be argued that the existence of EU legislation such as the Ambient Air Quality Directives, the Clean Vehicles Directive and the ITS Directive could be more directly linked to the improvements in cities than the Urban Mobility Package.

trends (e.g. increasingly aging societies and the growing number of people with reduced mobility calling for more focus on barrier-free accessibility) and the emerging lessons from the COVID pandemic (e.g. more focus on resilience of local transport and impact of new ways of working). Finally, the digital and data-related aspects – many of which are subject to ongoing policy and legislative processes in the EU – will have to be better captured.

Therefore, while the original UMP objectives are still largely relevant, there is a need to consider and better reflect the above challenges and developments and, in particular, the decarbonisation of urban transport interlinked with the just and inclusive transition. Other persistent issues remain and call for further action to effectively tackle them, but often one action – such as reducing our dependence on the conventionally fuelled cars in cities – can deliver co benefits, for example improved air quality, fewer road deaths, and potentially less congestion and noise.

6.3. Conclusion 3: There is a significant variation in the degree to which UMP measures have been implemented by Member States

There are significant differences between Member States - and sometimes within Member States - in terms of their needs, drivers, barriers, institutional settings and approaches to urban mobility. More concretely, in some Member States there is a well-established tradition of urban mobility planning and strong focus on public transport and active mobility, for instance, while in others sustainable urban mobility remains a fairly novel concept and a strong car-centric approach prevails. Similarly, urban mobility is often a strictly local issue, while in other instances national authorities have a stronger role in shaping the approach to it.

These differences both stem from, and have led to, a significant variation between Member States with respect to the degree to which the UMP measures have been disseminated and taken up. This has resulted, inter alia, in uneven level support to cities across the EU in tackling urban mobility challenges and thus compromising the achievement of the necessary step-change, as envisaged in 2013.

6.4. Conclusion 4: EU support is important and necessary for capacity building, sharing of information and experience, and fostering collaboration and cooperation in the area of urban mobility

One of the main findings of the analysis was the benefit that 'reinforcing EU support measures' of the Urban Mobility Package provided through the numerous EU programmes, projects and events: they stimulated capacity building, sharing of information and experience, and fostered collaboration. Campaigns such as European Mobility Week, events such as the CIVITAS Forum Conference and the European Conference on SUMPs have been consistently cited as important for raising awareness and the exchange of experience and ideas. Similarly, the SUMP and CIVITAS awards play an important role in rewarding and incentivising the adoption of SUMPs and innovative urban mobility solutions. The European Platform on Sustainable Urban Mobility Plans (and ELTIS in general) was also considered to be a useful source of information about urban mobility despite the limitation in reliability and quantity of data[371].

Additionally, the SUMP guidelines have been translated into, or have served as the basis for, national guidelines and are well known among the consulted stakeholders. Their 2019 revision and a new set of dedicated topical guidance documents has been well received by local authorities, planners and stakeholders, with further topical guidance documents

[371] Linked to the fact that Member States are not required to provide urban mobility data

published in 2020 and more planned for the future. Taking part in EU projects (e.g. projects under the CIVITAS Initiative) and training activities has also enabled an exchange of information and experience between Member States and capacity building at the local level. Such projects have been especially instrumental in those Member States that did not have a strong tradition in sustainable urban mobility planning.

Therefore, the further development and promotion of these initiatives is considered to be important.

6.5. Conclusion 5: The UMP has not managed to engage Member States as intended

Following on from the previous conclusion, while the Urban Mobility Package contributed to raising awareness, capacity building and promoting sustainable urban mobility, it has not managed to bridge the gap in translating EU-level policy on sustainable urban mobility to tangible national action in particular. There has been a slow and incomplete uptake of Member State-specific UMP measures across the EU, with little indication that a major shift is taking place or has been initiated at national level. While the Package envisaged that Member States would play this intermediary role, this does not appear to have consistently worked in practice. It has resulted in very divergent situations with regard to national SUMP frameworks and related support to cities in designing, financing and implementing their local mobility plans and measures.

In addition, the Urban Mobility Package and its measures are not as widely known as they could be, which would be at least partly due to the limited role played by most Member States. The evidence shows that those actively involved in EU programmes, projects and activities are well aware of them; however, they are not uniformly known across the EU. There is also little evidence of Member States actively promoting the Urban Mobility Package or specific measures towards the regional and local levels in a systematic and consistent manner.

6.6. Conclusion 6: The coordination of the public and private sector interventions has been sub-optimal and requires updating

It was not possible to establish whether the Urban Mobility Package has had a substantial impact as regards coordinating public and private sector interventions in the four areas referred to in the UMP, namely urban logistics, urban ITS, urban vehicle access regulations and urban road safety. Despite the related developments at EU level, the evaluation did not find clear evidence that the Member State-specific UMP measures were duly taken into consideration. Similarly, there is little evidence that the EU-level UMP measures, such as the studies and non-binding guidance documents on urban logistics and urban access regulation, were well known or utilised. This has also resulted, as it is the case of UVARs, in diverging implementation of increasing number of schemes in various Member States, with negative consequences to some of the principles of EU single market.

Moreover, while the four areas were considered to be relevant by the consulted stakeholders, several other areas were also identified as equally or more relevant, such as public transport and active mobility. Inclusivity and a greater consideration for the needs of different groups of urban mobility stakeholders, such as vulnerable users and public transport users without alternative modal options, were also identified as an area that should have had a greater prominence in the Package.

6.7. Conclusion 7: EU funding has been instrumental in the implementation of urban mobility measures in cities, but strong link with SUMPs has been lacking

Key challenges for cities and local authorities looking to invest in sustainable urban mobility are availability and access to funding. The financial support provided through EU funds (e.g. ESI funding, Horizon 2020, CEF) has been instrumental to cities in this regard, with wider implications on the operation of long-distance transport networks (such as TEN-T). Even though the EU funding for urban mobility is, overall, regarded positively, it is not linked to SUMPs, which might diminish the impact. The continuation of EU funds and support was seen as a contributory factor towards meeting the needs and capacities of local authorities.

6.8. Conclusion 8: The support for SUMPs has made an important contribution to the evolution of mobility planning at the city level; however, further work is needed to ensure SUMP implementation and quality

SUMPs are a cornerstone of the Urban Mobility Package and one of its most recognisable elements, growing in popularity and number since the implementation of the Package. However, while the have become relatively well known, there is still room for improvement, as many cities have not yet developed their own plan. Additionally, the evaluation shows that the development of a SUMP does not necessarily guarantee that it will be implemented or that it is of sufficient quality. In this respect, the areas such as SUMP implementation and quality assurance require additional attention (in particular at the national level) to ensure that SUMPs are effective tools towards achieving sustainable urban mobility and more decarbonisation objectives. Furthermore, there is evidence to suggest that the full application of all aspects of the SUMP process may not match the needs and capacities of smaller cities with lower density.

6.9. Conclusion 9: Urban mobility data collection and availability is of insufficient quality, and requires more effort in particular from Member States

There is a general lack of systematically collected comprehensive, coherent, gender disaggregated and comparable data at the city level in the EU for example on the use of active modes, motorised or public transport, length of trips, etc. This makes progress tracking and comparison very challenging, and risks to undermine policy making at European, national and local levels of government. Currently there is no legal basis (i.e. no requirement) for Member States to report data on urban mobility to the European Commission. This problem was also noted by the Court of Auditors, which has requested the Commission to take measures to address it, focusing on urban nodes on the TEN-T network. Data of high quality is instrumental in identifying trends, evaluating the impact of locally implemented urban mobility measures and planning future policy. While ELTIS provides relevant information on urban mobility developments in different Member States, the data is self-reported and incomplete and, as such, is not considered to be fully reliable.

OVERVIEW OF ANNEXES:

- Annex 1: Procedural information
- Annex 2: Summary of public and stakeholder consultation
- Annex 3: Methodology: reconstructed intervention logic and evaluation questions matrix
- Annex 4: Architecture of the Urban Mobility Package
- Annex 5: Overview of policy areas that are directly or indirectly linked to urban mobility

ANNEX 1: PROCEDURAL INFORMATION

1. Lead DG, DeCIDE PLANNING/CWP REFERENCES

DG MOVE is the lead Directorate General for the evaluation of the Urban Mobility Package. The Decide Planning entry is: PLAN/2018/4719

2. Organisation and timing

The evaluation was launched in November 2018. The evaluation was coordinated by an Inter-Service Steering Group (ISG), which was established early in the evaluation process and which was consulted on all key deliverables.

Date	Activity
20 November 2018	Publication of the evaluation Roadmap
20 November 2018 – 18 December 2018	Feedback period to the Roadmap
4 December 2018	First ISG meeting
23 May 2019	Start of an external support study
7 June 2019	ISG meeting (kick-off of the study)
17 July 2019	Inception report meeting
11 September 2019 – 4 December 2019	Public consultation period
5 April 2019, 29 November 2019, 18 May 2020	Meetings of Member States Expert Group (EGUM) where the UMP evaluation was discussed
29 January 2020	Urban Public Transport Working Group (social dialogue) meeting where the UMP evaluation was discussed
4 February 2020	ISG meeting (interim report of the study)
3 June 2020	Dedicated EGUM meeting (draft final report)
14 May 2020	ISG meeting (draft final report of the study)
8 September 2020	Urban Public Transport Working Group (social dialogue) meeting where the UMP evaluation was discussed

3. The ISG is composed of DG MOVE (unit B4), DGs REGIO, ENV, CLIMA, GROW, ENER, RTD, SANTE, JUST, JRC, COMM, TAXUD, BUDG, Legal Service and Secretariat-General

4. Exceptions to the better regulation guidelines

The Better Regulation Guidelines were followed. No exceptions applicable.

5. Consultation of the RSB (if applicable)

This evaluation was not selected for assessment by the Regulatory Scrutiny Board.

5. Evidence, sources and quality

The evaluation relies to a large extent on the external support study to the evaluation led by Ramboll and, to a lesser extent, on the Special report 06/2020: Sustainable Urban Mobility in the EU by the Court of Auditors . During the evaluation the consultant used a mix of approaches including evaluation matrix, desk research, field research and case studies. Literature evidence was identified to develop several of the indicators that support the analysis for the evaluation questions and subsequently to identify key information for the development of the answers to the evaluation questions.

ANNEX 2: SUMMARY OF PUBLIC AND STAKEHOLDER CONSULTATION

Introduction

This stakeholder consultation synopsis provides a summary of the stakeholder consultation activities and results, which were carried out as part of the evaluation of the Urban Mobility Package. The annex includes a basic analysis of the responses of stakeholders groups involved in the consultation process and a summary of the main issues they raised.

The objectives of the consultation activities were to: provide the public and the stakeholders with an opportunity to express their views on the UMP as well as to express their opinions on possible and/or desirable changes to the UMP; and gather specialized input on the impacts of the UMP.

The following consultation activities were undertaken:

- Targeted survey questionnaires
- Targeted interviews
- Open public consultation (from 11 September 2019 – 4 December 2019)

The consultation activities targeted through different consultation activities a wide range of stakeholders across various governance levels and geographic coverage. Most of the stakeholder's categories were consulted in 2 out of 23 of the consultation activities. Exceptions are EU Institutions and public / private actors at city level, which were only consulted through interviews. EU citizens and NGO's/academic & research institutions were consulted only through public consultation.

Targeted survey questionnaires

The first part of the stakeholder consultation consisted of a survey questionnaires to three core stakeholder groups:

Stakeholders group	Respondents
National authorities survey (EGUM members)	32 responses from 19 MS and 1 non-MS: Overall 19 Member States were represented, and one non-EU Member State: France (4), Latvia (3), Hungary (3), Greece (2), Austria (2), Spain (2), Slovenia (2), Poland (2), Cyprus (2), Netherlands (1), Luxembourg (1), Finland (1), Belgium (1), Portugal (1), Lithuania (1), Italy (1), Germany (1), Bulgaria (1) and Norway (1)
Local and Regional authorities	6 responses from 4 MS: Finland (1), Hungary (2), Malta (1), Sweden (2)
Civil society, networks and private sector actors and their representatives at various levels (local, regional, national, EU).	14 responses from 5 MS and 1 non-MS: (Belgium (4), Bulgaria (1), Ireland (2), Italy (2), Spain (1) and United Kingdom (2).

Interviews

Targeted interviews

The interviews aimed to address topics which could not be covered within the format of the targeted surveys and any important data gaps identified in desk research and survey findings. The following types of interviews were carried out:

- Interviews with **European institutions and agencies** about the relevance, contribution and coherence of the UMP to or with other policy objectives.
- Interviews with **national, regional and local level stakeholders**, including:
    - Interviews with national, regional and local authorities, as well as city-level public/private sector actors and civil society at city and national level, answering the research questions for case studies.
    - Collection of quantitative cost and performance indicator data from national authorities implementing the measures of the UMP nationally, and local authorities developing and implementing SUMPs.
    - Thematic interviews with **civil society and private sector stakeholders**

A total number of 67 interviews were carried out.

Exploratory interviews

In the design phase of the study, ten exploratory interviews were carried out with different EU institutions and agencies. The aim of the exploratory interviews was to gain a better understanding of the subject matter, challenges posed in the UMP area and identify relevant sources of evidence for the study. The findings from these exploratory interviews fed directly into the revisions of the Evaluation Questions Matrix, the refinement of the Intervention Logic and further development of the methodology for the remaining stages of the project.

Problems and limitations

During the roll-out of the interviews some problems were encountered due to COVID-19, which limited the numbers of respondents. These problems were resolved through replacement with other consultation activities.

Public consultation

The consultation was launched on the 11th of September 2019 and remained open for responses until the 4th of December 2019. The public consultation was open to all stakeholder groups and was designed in a way that did not cover technical topics (that were covered in the targeted surveys) to enable all interested stakeholders to take part, including EU citizens. Overall, 207 responses were received from:

- EU Citizens (89)
- Company / business organisations (41)
- Public authorities (26)
- Business associations (10)
- Non-governmental organisations (16)
- Others (7)
- Academic/research institutions (5)

- Consumer organisations (3)
- Trade unions (3)
- Non-Eu citizens (1)
- Environmental organisations (1)

Problems and limitations

During the analysis of the public consultation results one campaign was identified, and these results were presented at the end of the public consultation report. Responses were provided in 16 different EU-languages, which was addressed by using a machine translation and spot check.

Results of the consultation

Targeted survey questionnaires

National authorities survey
The targeted survey aimed to consult the views of people who are working for National Authorities in EU Member States. In particular this survey was distributed to the European Group on Urban Mobility (EGUM) members. The survey gathered 52 responses, of which 15 were fully completed and 36 were partially completed (i.e. started completing the survey but did not answer all questions).

The survey was structured and presented across the following area: background/profiling questions, relevance, effectiveness, efficiency and coherence.

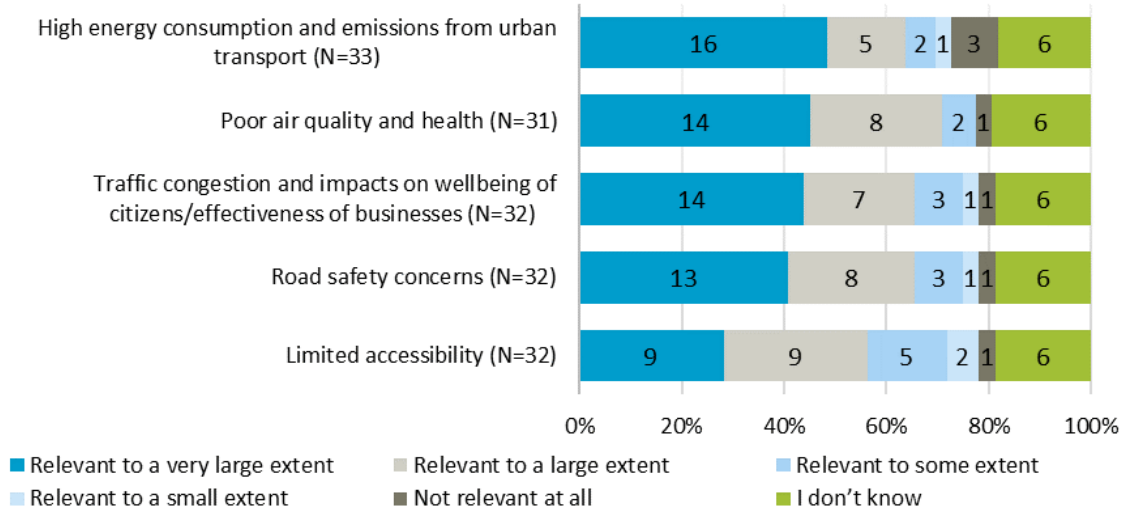
1. Background/ profiling questions

To start, the respondents were asked a series of profiling questions, specifying which country their organisation is based in and which department they represent. Overall, 19 Member States were represented along with one non-EU Member State (Norway). Across each of the counties the respondents were representing their respective Ministry for transport with similar ministries being mentioned, such as in innovation and technology or infrastructure.

2. Relevance

The first question pertained to the evaluation criterion of the relevance of the UMP. The respondents were asked to what extent the UMP measures address the urban mobility needs in their country. Overall, 22 out of 31 respondents were of the view that the measures were able to address poor air quality and health at the local level. The following question asked what factors impede the ability of each Member State to implement efficient urban mobility approaches. Overall, none of the statements gathered any significant majorities, rather the responses are fairly balanced with the exception of the lack of incentive for businesses and the lack of information. In a next question respondents were asked how satisfied they are with the way in which the UMP has helped their country address a series of challenges such as lack of capacity, funding and information. Overall, the degree to which the respondents were satisfied to a very large and large extent was fairly low, the results across the respondents being satisfied to some /small extent was greater.

To what extent do you think that the Urban Mobility Package measures you are aware of, address the urban mobility needs and reflect the capacities at local level in your country? (n=variable)



In the following open question, the respondents were asked to list any new problems which hinder the activities in urban mobility in their country. Four main themes emerged from across the responses: [1] Lack of political support, [2] coordination between EU and Member State legislation, [3] lack of support for businesses at the local level and [4] lack of funding coordination.

The next question explored how each of the respondent's organisation's needs have changed since the implementation of the UMP. Overall, while there was no clear majority overall, several areas showed a majority view that their needs had increased somewhat/significantly. In a follow-up question, the respondents were asked to list four main developments that have impacted urban mobility in their country. Across the answers provided, one main theme which emerged is the development of SUMPs in terms of their implementation both at the local and regional levels. Similarly, the development of national plans was also raised as being an important development in their country with respect to urban mobility.

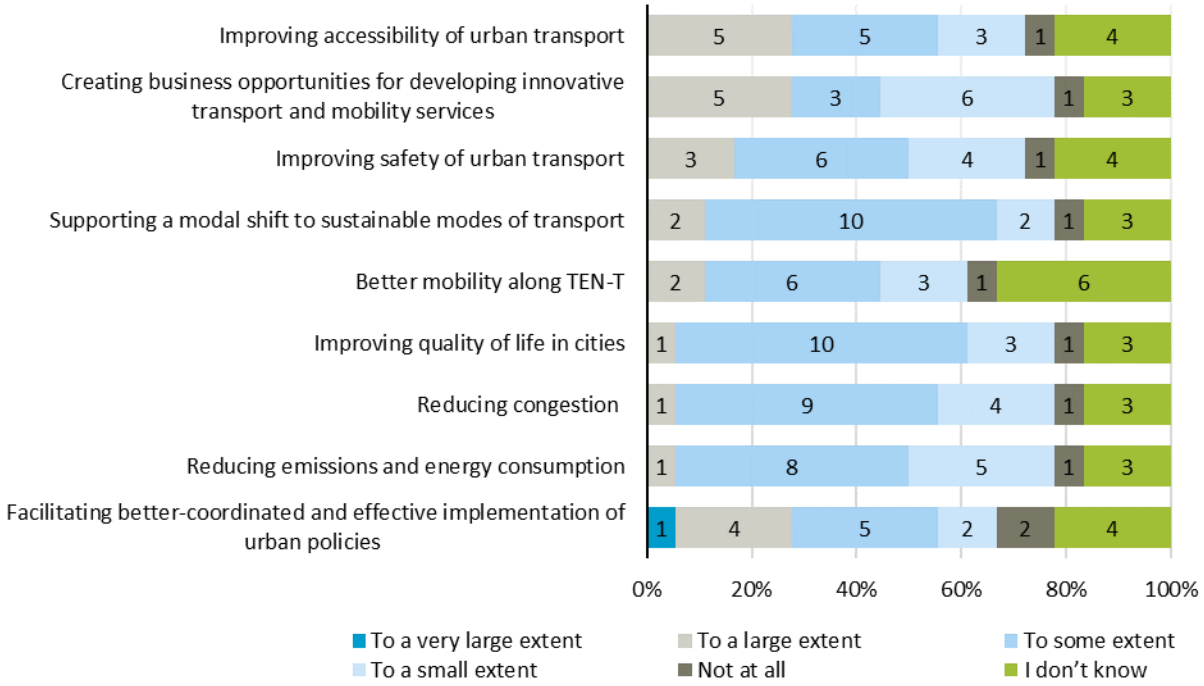
In transition from the questions on the current needs and current developments in urban mobility across each Member State, the following question asked the respondents to answer to what extent they agreed that the UMP had encouraged the uptake of SUMPs and the need for support for SUMP implementation. Overall, the majority of respondents agreed positively to a very large/ large extent.

The next question asked the respondents to answer to what extent the involvement of the Member States with regards to the UMP has been successful. Only half of the respondents found this to a large/ very large extent positive.

3. Effectiveness

Following on the section on relevance, this section explores the effectiveness of the UMP across a number of different areas. To start, a question was asked to what extent the participants thought that the UMP has contributed to achieving a series of objectives on congestion, modal split, accessibility and others. Across the listed objectives, the main response was that the UMP contributed to some/ a small extent, therefore it was not felt to be conclusive from the answers of the respondents which objectives the UMP contributed to.

To what extent do you think that the Urban Mobility Package has contributed to achieving the following objectives...(n=18)



In the next question, the respondents were asked in an open question which three important factors have contributed to achieving the urban mobility objectives in each of the respondent's country. The three most salient factors that contributed to their country's urban mobility objectives were: [1] SUMPs, [2] rise in the climate change agenda and [3] environmental investments. In another open question, the respondents were again asked to list three important factors, however this time detailing which factors have hindered their country's urban mobility objectives. This three factors that were listed by each included: [1] lack of funding, [2] political will and [3] poor decision making.

Urban Mobility Package Measures

This sub-chapter explores the effectiveness of the UMP measures. The first of these questions asked the respondents how aware they are of the specific measures under three main areas: Reinforcing EU support, SUMPs and Coordinated public and private-sector interventions.

- The respondents were asked about their awareness of the measures under the pillar of reinforcing EU support. Two measures gathered support: EGUM and the CIVITAS 2020 initiative. Interestingly, the urban mobility score board gathered the least number of respondents that were aware of.

- The respondents were asked the same question but under the area of SUMPs. In this question, the respondents were asked to differentiate whether they are aware of it and if their organisation has implemented it. Across all the measures, the answers are fairly balanced between awareness and implementation

- The following question asked the respondents if they are aware/ if their organisation has implemented the various measures. The areas which gained proportionally the greatest awareness was under the European Commission guidance documents on urban access regulations.

- Following on a more general question on the awareness of the measures, the respondents were asked to provide more detail on their experiences with the measures. When asked to choose up to five measures that they would like to address in more detail, the top response came from ensuring at Member State level that SUMPs are developed, implemented and integrated into a wider urban and territorial development strategy.

- The respondents were asked to provide further detail on the extent to which they believe that the UMP measures address the needs and reflect the capacities at the local level. The measure which gathered the highest degree of salience was for providing targeted financial support (3 out of 4 to a very large/ large extent).

- When asked if there is a coordinated approach to urban mobility in their country, nine out of the 15 respondents answered "yes" while only four answered "no". Similar trends were also found when asked if their Member State had benefited from any type of support from the Commission in setting up SUMPs.

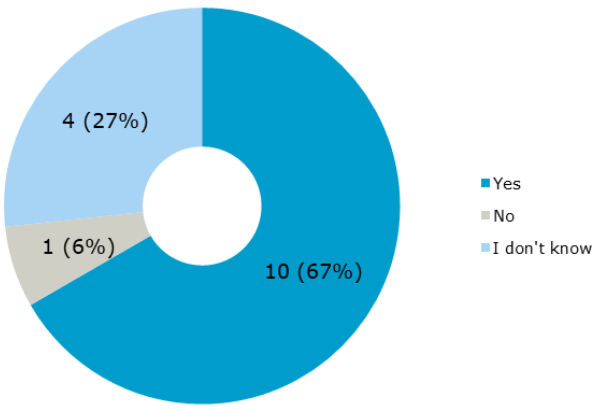
Support from the EU

Under this sub-chapter the respondents were again asked a series of broader questions, however this time pertaining to different forms of EU support. These forms include EU information platforms and networks, EU Support and EU policy framework, guidance and standardisation. Overall, the majority of the respondents answered that all three types of support match the needs and capacities at the national level when it comes to urban mobility.

In the following question the respondents were asked in an open question how the EU could better meet their country's needs. While each of the seven Member States (that provided answers) had some specific needs, more broadly, the most salient action that was suggested was for stronger financial support (especially for the uptake of SUMP's).

The respondents were asked if they think that the UMP has led to the development of well-integrated urban mobility approaches. The majority (67%) answered that they the UMP has led to a well-integrated urban mobility approach.

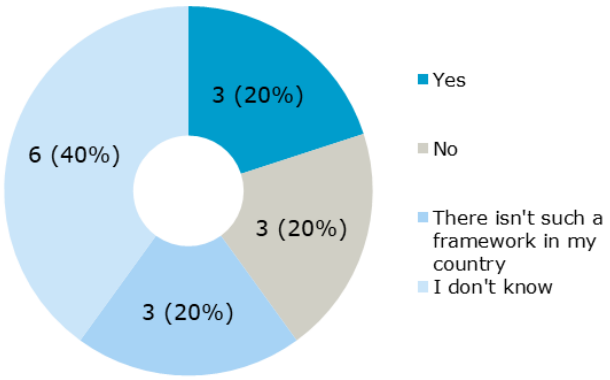
Based on your experience, do you think the Urban Mobility Package has led to the development of well-integrated urban mobility approaches? (n=15)



Urban Access Regulations

While the majority of respondents noted that the Urban Mobility Package had led to the development of well-integrated urban mobility approaches (67%), under the area of Urban Access Regulations, the results weren't as clear. Only 20% answered that the UMP had contributed to the development of an urban access regulation framework.

Do you think the Urban Mobility Package has contributed to the development of an urban access regulation framework in your country? (n=15)



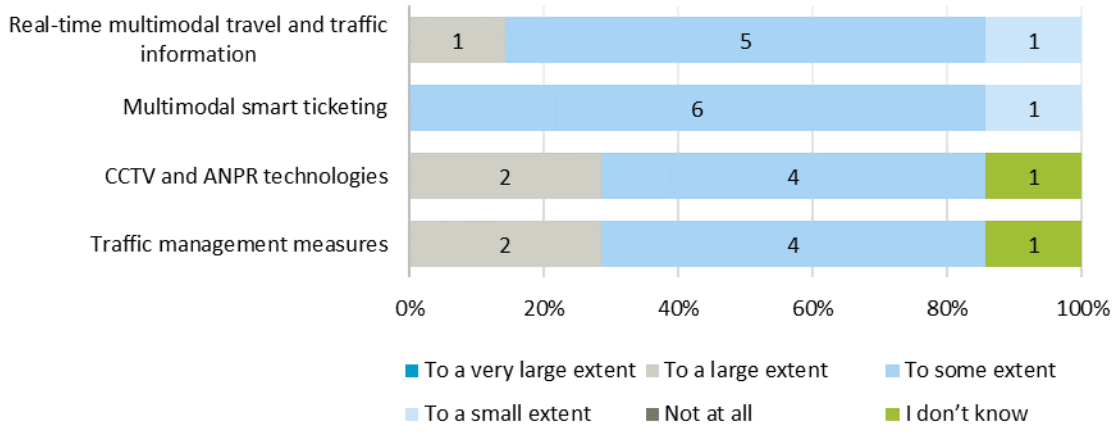
In a follow up question, the respondents were asked if the UMP has contributed to the implementation of four key parts of Urban Access Regulation Schemes (UVARs): Congestion, Low emission, Pedestrian and Urban road charging zones. This question had a low number of answers, which were not distinctive.

Intelligent Transport Systems

In the area of Intelligent Transport Systems (ITS), the respondents were asked a similar question regarding whether the UMP has helped in the deployment of ITS in their region/city/town. This question failed to provide any clear majorities with there being a split between respondents that answered "yes" and those that answered that they do not know.

Similar to the previous question, the respondents were asked if the UMP has contributed to specific aspects of ITS, including: Real-time multimodal travel and traffic information, multimodal smart ticketing, CCTV and ANPR technologies and traffic management measures. The question however did not provide any clear indications with most of the respondents answering "to some extent" across all three areas.

Question 26b: deployment of more and better Intelligent Transport Systems in your country, such as... (n=7)

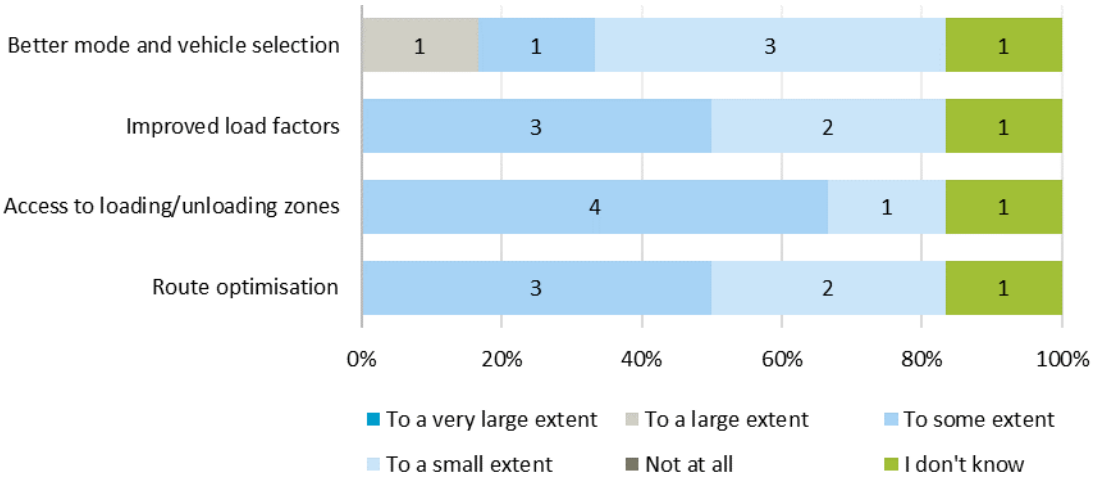


Urban Logistics

Under the area of Urban logistics, a similar finding was observed where there was an even split between the respondents which answered the UMP had contributed to the integration of their country's urban logistics strategy and those that did not know.

In a similar format to the previous sub-sections, the respondents were asked to specify whether the UMP had contributed to the deployment of better urban logistics approaches in four key areas: Route optimisation, access to loading/unloading zones, improved load factors and better mode and vehicle selection. Similar to the previous questions, no clear indications were provided with most of the respondents answering that the UMP has contributed only "to some extent". Under the area of better mode and vehicle selection, three respondents indicated that the UMP only contributed to a "small extent".

Do you think that the Urban Mobility Package has contributed to the deployment of more and better urban logistics approaches in your country involving... (n=6)



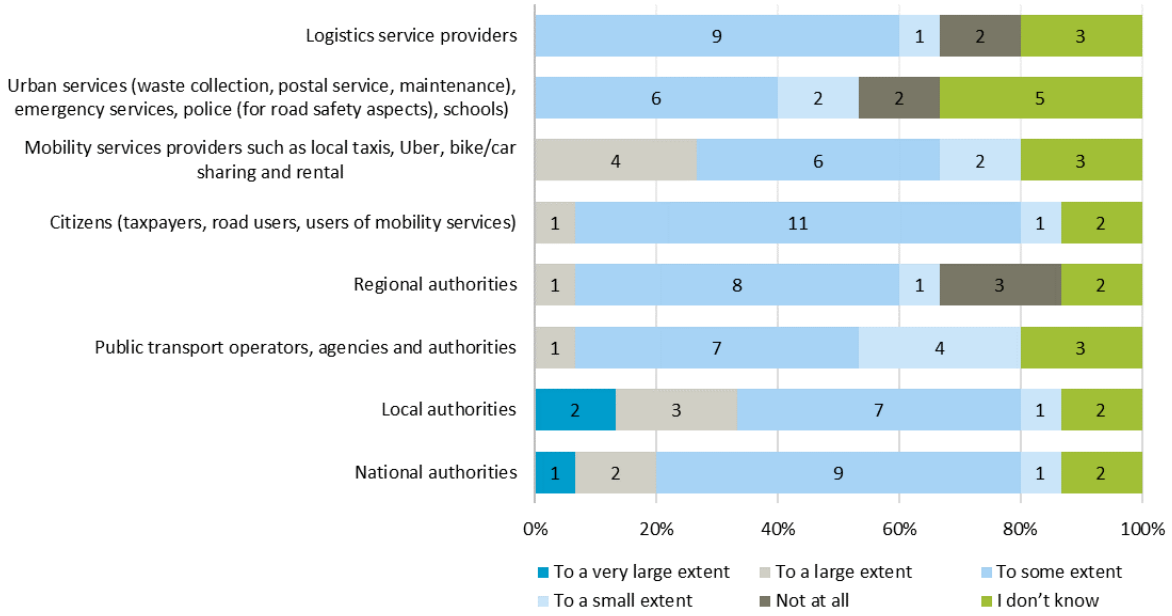
Urban Road Safety

Under the area of urban road safety, while five respondents answered that that the UMP has contributed to the integration of urban road safety regulations in urban mobility frameworks in the respondent's countries, a large proportion answered that they do not know.

4. Efficiency

The following questions pertained to the efficiency of the UMP across a range of areas and criterion. The first of these questions asked to what extent the respondents believed that the stakeholders benefited from the implementation of the UMP. While there were no clear majorities of answers to a very large or large extent, some indicative views where available. For example, some respondents thought that local and national authorities benefited to some extent, along with citizens and mobility services providers.

To what extent do you believe that the following stakeholders have benefited from the implementation of the Urban Mobility Package? (n=15)



The respondents were asked if their organisation incurred any costs related to the implementation of the measures under the UMP. A small majority (54%) answered that their organisation has incurred costs. the respondents were asked to indicate which statements best describes the relation between the implementation cost of the UMP measures and their associated benefits. Overall, most of the statements highlighted that implementation costs were proportional to the benefits

5. Coherence

The next section asked three main questions under the evaluation criterion of coherence. The first of these questions asked to what extent the respondents believed that the UMP is complementary and coherent across a range of EU initiatives as TEN-T, Erasmus+ and others. Overall most of the EU initiatives listed gathered some degree of support for them being complementary to the UMP, with the most complementary being the "Mobility package: Sustainable Mobility for Europe: safe, connected, and clean". No areas gathered significant support that they are in conflict with one another.

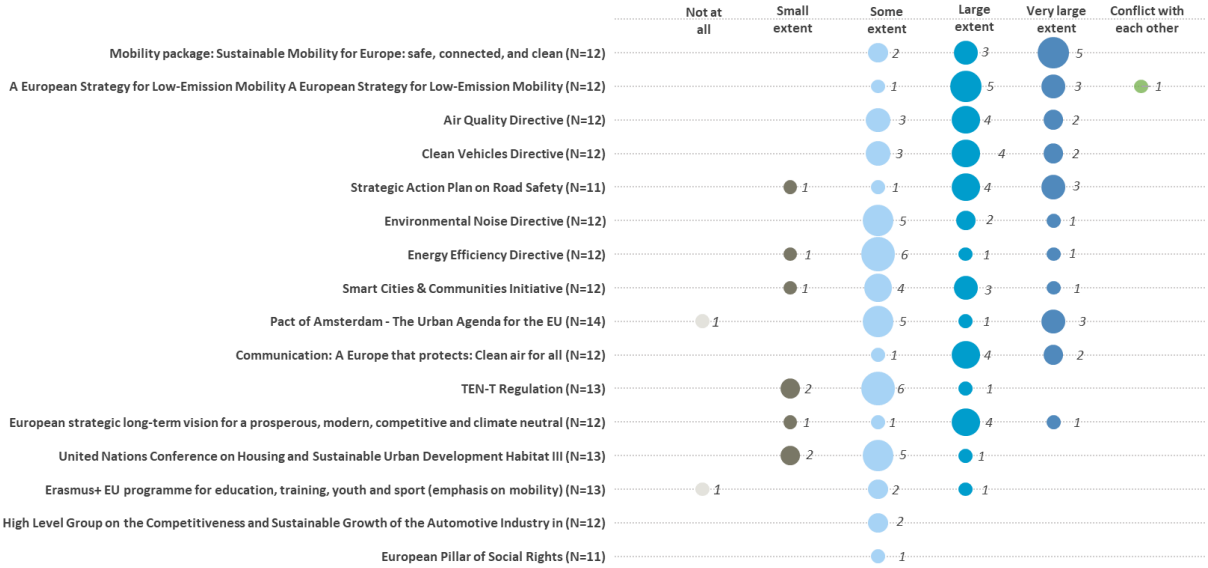
The respondents were asked if they think that the SUMPs in their Member State have been integrated with other local policies. While no majorities were observed, there was a slit between those that answered "yes" and those that answered that they do not know.

In a follow-up question, the respondents were asked to specify which local policies contained synergies with the SUMPs. From the three participants which provided answers, the following local policies where listed: transport organisation and the operation of environmentally friendly

When it comes to external coherence EGUM surveyed the external UMP coherence with other policy documents. In general, the EGUM members saw a large coherence between related European directives and initiatives. However, on the European TEN-T regulation and UN conference on housing and sustainable urban development were indicated to show less coherence.

EGUM survey responses for external UMP coherence with selected policy documents

Note: the size of the bubble represents the numbers stated beside it.



6. EU Added Value

The final section in the survey contained two questions under the evaluation criterion of "EU added value" which seeks to explore the value from intervention from the EU compared to no intervention. The first of the two questions asked the respondents to specify to what extent they agree with a series of statements. Overall, the areas the statements that gathered the most support with those that agree to a very large/ large extent were:

- Withdrawing EU support would negatively affect the exchange of best practices and experiences in the field of urban mobility.
- Withdrawing EU support would slow down innovation due to the lack of EU financing and support
- Withdrawing EU support would lead to a slower implementation of public mobility projects due to the lack of EU financing and support

The final question of the survey the respondents were asked to share any relevant national, regional and local studies and data that would be useful for the purposes of the evaluation, to which two respondents provided information. The most pertinent example which was provided was the sustainable development strategy for transport by 2030, which was adopted by the Council of Ministers in Poland.

Targeted interviews

European institutions and agencies

This category consisted of five interviews from EU institutions and agencies. Overall, most of the interviews highlighted that all four areas of the UMP are relevant (urban logistics, urban ITS, urban road safety and urban access regulations).

The interviewees agreed that there has been an improvement in how challenges to urban mobility are addressed. The change rate however differs, from high (air quality) to low (urban road safety). The most salient challenges were found in high energy consumption and emissions from urban transport, poor air quality and health, limited accessibility, road safety accidents, opportunities and incentives for businesses to develop innovative transport technologies and traffic congestion and its impact on wellbeing.

National Authorities

This category consisted of six interviews with four national authorities in the EU. Despite the low number of interviewees, there was a high level of detail provided. but are rather specific to their own Member State. On the relevance of the UMP and urban mobility more generally, similar to the EU level, five main challenges were highlighted funding, political focus and strategy at national and EU level, capacity and coordination from planning authorities, information and national/regional framework for urban mobility planning.

Regional/ local authorities

This category consisted of 19 interviews representing four Member States. Similar to the national authorities section above, these interviews cover the regional and local authorities that were interviewed as part of four case studies. The raised challenges can be summarised in the following six areas: funding, capacity and coordination from planning authorities, political focus and strategy at national level, integration of mobility issues in planning approaches, national or regional framework for urban mobility planning and insufficient information.

Overall, many of the interviews noted that there had been an improvement in urban mobility challenges since 2013, however the extent to which this was a result of the UMP was unclear. The ELTIS network, SUMPs and EU action were however stated as strong stimuli.

Civil society at EU/national level

This category consisted of 14 interviews representing civil society at the EU/national level. This includes European networks, national bodies and national representative organisations. Compared to the other stakeholder groups, interviewees under this stakeholder group outlined five main challenges relating to the UMP and urban mobility more generally: political focus, information, funding, capacity and coordination from planning authorities and conflicting social and environmental problems.

The interviewees signalled a slow rate of rate of change for some challenges since 2013, but on the other hand an shift with regard to awareness of issues and rise in the political agenda. In general the UMP objectives were found to be relevant and effective. Improvement on the UMP was seen on specific targets (in line with climate and energy targets), making SUMP

mandatory, empowering local authorities, permanently implementing measures from the European Mobility week and modification of the EGUM role.

Civil society at local/ city-level

This category consisted of 12 interviews representing civil society at the local/ city level which includes local NGOs and representatives of transport users. In this stakeholder category, most salient of challenges were found in capacity and coordination for urban mobility planning, political will and focus from national politicians, clear allocation of responsibilities across different levels of governance and funding. :

Overall, the objectives of the UMP were found to be relevant by most of the interviewees, with most value through the development of SUMP guidelines. Where the UMP could improve is through establishing clear rules and economic incentives to assist the transition towards sustainable mobility.

Private sector actors at EU/national level

This category consisted of four interviews representing public/ private sector actors at the EU/national level which includes (but is not exclusive to) mobility service providers, technology innovators and infrastructure developers. In terms of the challenges that were raised, four main factors were highlighted: technological constraints, lack of funding, fragmented institutional response to urban mobility and coordination and capacity from planning authorities.

Overall, most of the interviewees noted that the UMP objectives are still relevant and partially effective in addressing urban mobility issues. Several areas were highlighted by the interviewees where improvements could be made by the UMP. Specifically, the creation of frameworks and measures for specific cities would help smaller areas develop and integrate urban mobility measures better. This is also coupled with the idea that a clearer policy focus which includes clear objectives to tackle environmental issues (e.g. air pollution) should be a priority.

Public/private sector actors at city-level

The final stakeholder group pertains to public/ private sector actors at the city level and included seven interviews. This group consisted of sub-stakeholder groups such as urbanism agencies and public transport operators. In a similar vein to the previous stakeholder groups, several challenges were highlighted in relation to the UMP and urban mobility more generally: clear allocation of responsibilities, changing societal thinking regarding sustainable mobility, capacity and coordination and information.

Despite these challenges the majority of interviewees noted that they had observed an improvement in urban mobility since 2013. In relation to the UMP pillars, most of the interviewees noted that they are still relevant, partially effective and addressing current needs.

With regards to the UMPs overall objective and its contribution to urban mobility across the EU, several interviewees noted that it is not only relevant, but it had also contributed to reaching their own objectives at the city level. This was seen through the specific EU tools at the regional and local levels and the increase in transport infrastructure investments. Two areas were highlighted where the UMP could improve: providing an overarching strategy for coordination between different governance levels and providing financial incentives for urban mobility projects to increase uniformity.

Open public consultation

The European Commission designed and carried out an Open Public Consultation (OPC) regarding urban mobility in the EU. The OPC was launched on 11th September 2019 and remained open for responses until 4th of December 2019. While a total of 207 responses were received, not all of the respondents completed all of the questions, therefore each of the questions have their own response rates indicated by "N=". In terms of the differences between stakeholders, each question will outline the main differences and similarities between the different groups. For open questions, due to the way in which the written responses were coded, greater detail is provided on the specific number of respondents per theme. The OPC consisted of 18 questions.

The following sections set out the analysis of all the responses in line with the structure of the questionnaire and in the following order:

Profiling Questions

Respondents were able to complete the survey in any EU language. The majority choose English. Respondents were asked to indicate the type of stakeholder group they represent. The largest group identified was 'EU Citizens' followed by 'company/business organisation'. The majority of the respondents operate at either the regional or local level. Seven out of the 26 responses indicated that they operate at the national level while only three operate at the local level. Responses were gathered from 26 different countries. This includes 24 out of the 28 EU Member States

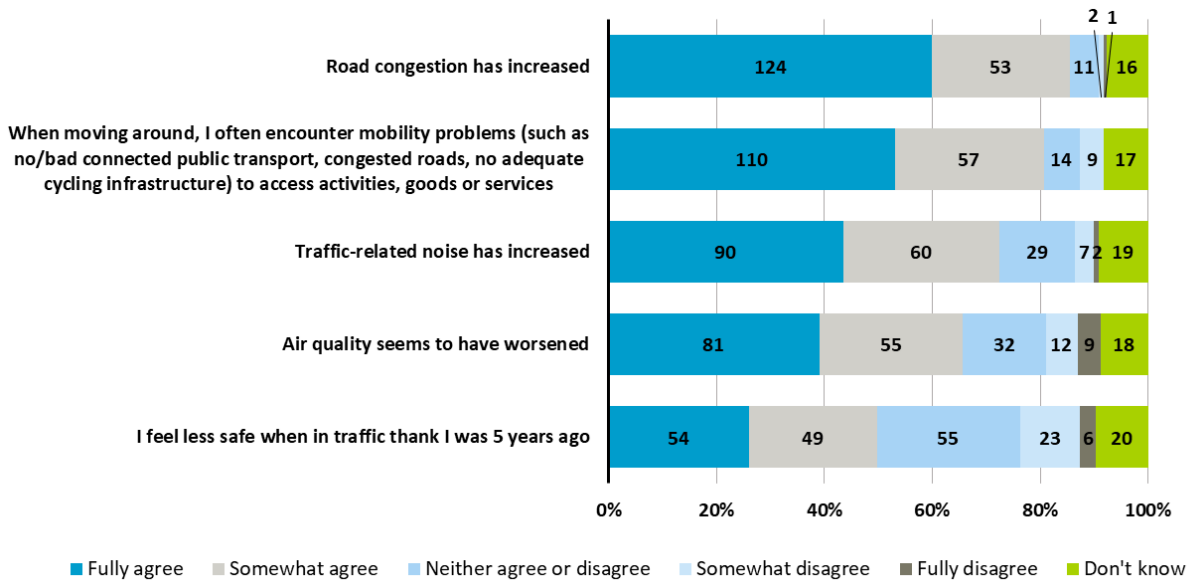
General Questions on EU urban mobility policy

This chapter opened with views on the key challenges related to urban mobility. The systematic analysis identified eight key challenges. The most salient challenge was the "lack of efficient public transportation systems (67%). This was followed by three other challenges (Car centric society, creating accessible infrastructure and tackling pollution). Other challenges were the accountancy for technological advancements, improving safety in urban transport systems, political challenges in urban mobility and the creation of gender balance in planning decisions.

In the second question, the respondents were asked on a four-point scale from "very important" to "not important" how important it is to have an urban mobility policy at the EU level. Overall, the vast majority of responses indicated that an urban mobility policy at the EU level is "very important".

Question three asked the respondents to highlight their agreement or disagreement with five statements that referred to specific problems related to urban mobility. The greatest agreement across all 207 respondents was that "road congestion" had increased.

To what extent do you agree or disagree with the following statements that refer to problems you encountered over the last 5 years (2014-2019) in the city or town you live /work/study in? (N=207)



In question four, the respondents were asked to what extent the benefits of the urban mobility plan had been attained over the past five years. In general, the responses indicate that the view is that the benefits have only been obtained "moderately" or "not at all" in the last five years.

Following on from the previous question on the benefits attained in the last five years, question five asked to what extent the costs of the urban mobility policy were justified given the benefits that could be achieved. Overall, the majority of responses indicated that the costs were "fully justified"

In question six, the respondents were asked to share their views on whether "leaving to local/national level the choice of suitable measures is more effectively addressing the problems at local level?" or if it leads to "divergent policies and further fragment the respective markets?". From the responses, five main themes emerged: The need for decisions to be made at the EU level, the need for decisions to be made at the local level, the need for a clear overarching strategy, divergence caused

While the respondents in the previous themes outlined their views on whether local issues should be treated at the local level, a smaller part of the respondents provided answers that did not outline a binary answer but instead provided the view that there needs to be a clear overarching strategy to deal with local issues. It is important to mention that while this overarching strategy would most likely originate from the EU or national authorities, the respondents did not always explicitly state this. by decisions at the local level and the need for decisions to be made at the national level.

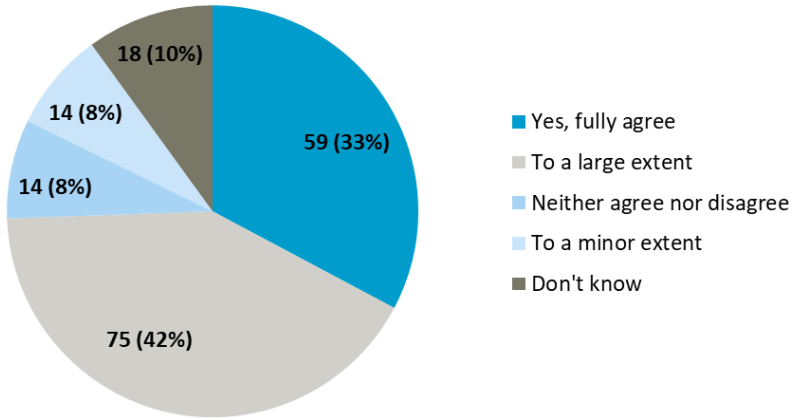
Following the question on the effectiveness of urban mobility measures, question seven asked whether these measures are still relevant given the recent developments and changes. Out of the eight measures that were identified, the majority of responses indicated that they were all relevant, be it being "fully relevant" or "substantially relevant". The measure on "EU financial support" gained the greatest support.

Sustainable urban mobility plans

This section questions the concept of sustainable urban mobility plans (SUMP). Questions included awareness of the concept, effectiveness and EU involvement.

To start, respondents were asked how familiar they were with the concept of sustainable urban mobility planning. Overall, a large amount of responses indicated that they are "very familiar with the concept of SUMPS". Following on from the previous question on the familiarity of the concept of SUMPs, next question asked whether the respondents were aware of a SUMP being prepared or implemented in their town or city. 56 % of the respondents indicated that they were aware of a SUMP being implemented in their town or city. When asked about the effectiveness of the SUMP as a mechanism to plan and deliver sustainable urban mobility at a city level, the majority of respondents indicated that they agree that it is an effective mechanism.

Do you agree that the SUMP is an effective mechanism to plan and deliver sustainable urban mobility at a city level? (N=176)



Coordinating public and private intervention

The respondents were asked on a four-point scale from "very important" to "don't know" how important they considered EU involvement across four coordinating public and private sector interventions. In general, all of the four interventions gathered support. In particular, the intervention to "disseminate good practice examples for road safety planning", gathered the greatest support.

Reinforcing EU support

This chapter inquires to the reinforcement of EU support in delivering sustainable urban mobility plans. The first question asked to what extent the support from the EU is in achieving successful local action in urban mobility. Overall, the responses indicate that the support from the EU is relevant. "Providing targeted financial support" gathered the greatest support with answering "very important", when asked about EU involvement. From a list of eight approaches on EU involvement, the approach where the "EU should support the share of experiences…" gathered the greatest support with 160 out of 207 answering "fully agree".

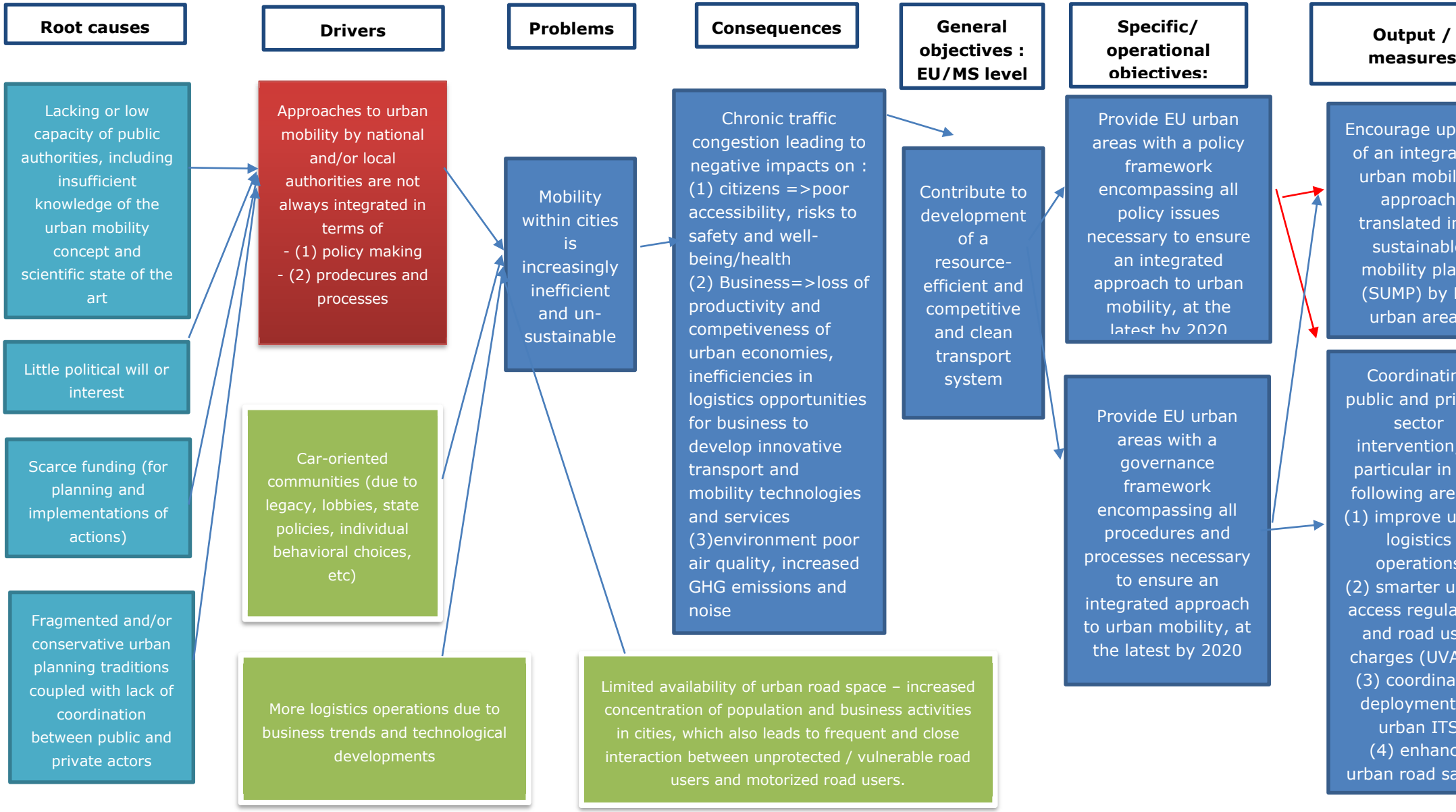
Further information

Finally, respondents were given the opportunity to provide further comments within the scope of the questionnaire. In total, 66 responses were provided and from analysis, six main views were identified:

- The EU needs to take more of a pro-active approach to urban mobility
- Public transport and more sustainable modes of travel should be encouraged in urban mobility plans
- Tackling climate change and protecting the environment should be a priority
- Safety needs to be central to all urban mobility plans
- Equal representation for all citizens
- There needs to be a greater sense of urgency across all levels of governance on urban mobility.

ANNEX 3: METHODOLOGY: RECONSTRUCTED INTERVENTION LOGIC AND EVALUATION QUESTIONS MATRIX

Annex 3a. Reconstructed intervention logic



Annex 3b : Evaluation questions matrix

Final evaluation question matrix

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
RELEVANCE				
1. To what extent do the original objectives of the UMP still correspond to the current needs of stakeholders?	1.1. What have been the developments since 2013 in the following areas of **problems** relating to urban mobility: ○ energy consumption and emissions from urban transport ○ air quality and health ○ traffic congestion and impacts on wellbeing of citizens/effectiveness of businesses ○ accessibility ○ safety/accidents, especially vulnerable users ○ opportunities/ incentives for businesses to develop innovative transport technologies and services	• The **problems** addressed by the UMP are still relevant, as evidenced by: ○ Quantitative indicators show that trends have remained similar or worsened ○ Stakeholders' opinion on how to prioritise the problems to be addressed by EU policy	**Quantitative indicators** of the evolution of key issues at EU/MS/regional/city level since 2013, i.e.: • Energy consumption and GHG emissions from urban transport • Air pollutant emissions • Noise levels • Congestion (congestion costs; TomTom congestion index) • Accessibility indicators (e.g. time to work, difficulty of access to good public transport) • Safety (e.g. number of accidents / fatalities involving vulnerable road users in urban areas) • Modal shares • Accessibility to public transport for persons with mobility issues or indicators on the level of public transport **Qualitative indicators**: • Perception of stakeholders on importance of addressing problems (ranking)	• Desk review including Eurostat data • Analysis of the evaluation baseline • OPC • Targeted interviews with national, regional and local stakeholders • Targeted interviews with European institutions and agencies
	1.2. To what extent is there still a need to support local and national authorities to develop and implement efficient and appropriate urban mobility approaches?	• The quantitative and qualitative indicators show that there is still a need to support local and national authorities • The following **drivers** are identified leading to identified problems in cities (as identified in the evaluation TOR Intervention Logic) either by the stakeholders or from the analysis of other data collected: ○ Lack of political focus and	**Quantitative indicators:** • Share of MS with National, regional, local policies and frameworks for urban mobility planning • Number and type of financial instruments available to support implementation of urban mobility approaches (at EU level and at MS level, at least for the case studies) • Estimate of volume of funds available **Qualitative indicators:** • Perception of stakeholders on prevalence of	• Desk review including Eurostat data • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		strategy ○ Lack of a national or regional framework for urban mobility planning ○ Lack of capacity and coordination from planning authorities ○ Lack of funding ○ Lack of integration of mobility issues in planning approaches ○ Lack of information ○ Complexity and variety of existing rules	drivers • Perception on stakeholders on importance of drivers (ranking)	
	1.3. How have the **needs** of stakeholders changed since the adoption of the UMP? Needs relate in particular to the following aspects which can help local stakeholders address the problems (see Q1.1) and drivers (see Q1.2) relating to urban mobility: ○ Financial resources ○ Human resources ○ Organisational resources ○ Information availability ○ Political focus ○ Regulatory support	• The **needs** addressed are still relevant, as evidenced by: ○ Quantitative indicators show that trends have remained the same or worsened ○ Desk review findings on needs of stakeholders ○ Stakeholders' opinion on how to prioritise the needs to be addressed by EU policy ○ Stakeholders' opinion on the potential new policy approaches needed to address needs	**Quantitative indicators** • Indicators (from Q1) show continuation or worsening of trends, indicating a clear need for adoption/revision of policy approaches on urban mobility. **Qualitative indicators:** • Clear statements of needs in documentary evidence • Perception of stakeholders on needs in relation to trends identified • Perception of stakeholders on their own needs (ranking)	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
	1.4. Are there other new problems, drivers and needs limiting authorities and leading to inefficient or inappropriate planning approaches?	• N/A: Explorative	• N/A: Explorative	• Case studies • Targeted interviews with national, regional and local authorities • Survey • Open Public Consultation
	1.5. To what extent are the specific objectives of the UMP (as identified in the intervention logic) still relevant to the identified problems, drivers and needs? In particular:	• Desk review findings and perception of stakeholders confirm that the specific objectives of the UMP are aligned with current identified	**Qualitative indicators:** • Level of alignment between specific objectives of the UMP and current problems identified.	• Desk review • Case studies • Targeted interviews with national, regional and local

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	○ *Encouraging the uptake of integrated sustainable urban mobility approaches (SUMP) by EU urban areas encompassing a wide range of policy issues (i.e. urban access regulations, ITS, urban logistics, road safety) and applying a governance framework with adequate procedures and processes* ○ *Providing support to cities to improve urban mobility and quality of life in cities* These objectives aimed to contribute to: ○ Reduced emissions and energy consumption ○ Reduced congestion and better mobility along TEN-T ○ Modal shift ○ Improved quality of life in cities ○ Business opportunities for developing innovative transport and mobility services ○ Better-coordinated and effective implementation of urban policies	problems, drivers and needs.	• Level of alignment between objectives of the UMP (and annexes) and current drivers identified • Level of alignment between objectives of the UMP (and annexes) and current needs identified	authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
2. To what extent are the various measures of the UMP still relevant, given the recent political, societal, regulatory and technological developments?	2.1. What are the most important recent political, societal, regulatory and technological developments at EU and national level that have a link to urban mobility?	• N/A Descriptive	**Quantitative indicators and descriptors** of new developments since 2013, inter alia • economic (e-commerce statistics, mobility as a service, shared economy in relation to mobility), • political (policy agendas on climate, energy, digitalisation, road safety, public transport development, etc.), • societal (urbanisation trends leading to population rise and population density limiting the availability of urban space, changes in mobility behaviour leading to modal shifts), • regulatory (increase in transport and mobility regulation (as evidenced in Q4 and Q5)), • technological (digitalisation trends including internet of things, automation, new	• Desk research: including Eurostat data • Analysis of the evaluation baseline • Targeted interviews with national, regional and local stakeholders • Targeted interviews with European institutions and agencies • Thematic interviews with civil society and private sector stakeholders • Survey • Case-studies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
			propulsion systems including e-mobility) **Qualitative indicator:** • Perception of stakeholders on main trends with a link to urban mobility (ranking)	
	2.2. To what extent are the measures of the UMP still relevant given the most important recent political, societal, regulatory and technological developments?	• The UMP measures are still relevant to address needs arising from recent developments identified in Q2.1. • There are no clear gaps between UMP measures and recent developments identified in Q2.1.	**Qualitative indicators:** • Alignment between UMP measures and recent developments identified • Perception of stakeholders on whether UMP is still relevant given recent developments (Q2.1)	• Desk research: including Eurostat data • Analysis of the evaluation baseline • Targeted interviews with national, regional and local stakeholders • Targeted interviews with European institutions and agencies • Survey • Case-studies
	2.3. To what extent are the 4 areas targeted in the UMP in 2013 (UVAR, logistics, ITS, road safety) still relevant given the most important recent political, societal, regulatory and technological developments?	• The four areas are still relevant to address needs arising from recent developments identified in Q2.1. • There are no clear gaps between the four areas and recent developments identified in Q2.1.	**Qualitative indicators:** • Alignment between the four areas and recent developments identified • Perception of stakeholders on whether the four areas are still relevant given recent developments (Q2.1)	• Desk research • Targeted interviews with national, regional and local stakeholders • Targeted interviews with European institutions and agencies • Survey • Case-studies
	2.4. Would other areas than the 4 mentioned in 2013 in the UMP (UVAR, logistics, ITS, road safety) be relevant given the problems, drivers and needs identified?	• N/A Explorative	• N/A Explorative	• Desk research • Targeted interviews with national, regional and local stakeholders • Targeted interviews with European institutions and agencies • Survey • Open Public Consultation • Case-studies
EFFECTIVENESS				

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
3. To what extent has the UMP contributed towards a more competitive and resource efficient urban mobility in the EU?	3.1. To what extent are the specific objectives/outcomes of the UMP being achieved, as identified in the intervention logic? • Reduced emissions and energy consumption • Reduced congestion and better mobility along TEN-T • Modal shift • Improved quality of life in cities • Business opportunities for developing innovative transport and mobility services • Better-coordinated and effective implementation of urban policies	• Quantitative indicators show that problems have decreased and positive trends in line with the UMP objectives can be observed compared to the baseline since 2013. • Stakeholders make a clear link between the UMP and the trends observed	**Quantitative indicators:** • Evolution of quantitative indicators since 2013 (*see the table on outcome indicators and sources included in the Inception Report*) **Qualitative indicators:** • Perception of stakeholders on the UMP contribution to achieving each objective	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey
	3.2. To what extent have the measures of the UMP been implemented as intended since 2013, by the EU and by Member States?	• Actions have been implemented at planned by the EU • Member States have implemented the actions relevant to their context and needs	**Quantitative indicators:** • Summary of actions implemented by the EU • Summary of actions implemented by Member States **Qualitative indicators:** • Perception of stakeholder on the whether EU and Member States have implemented actions as intended in the UMP	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies • Survey • Open Public Consultation
	3.3. To what extent have the measures of the UMP made progress towards their objectives and delivered the expected outputs and results?	There is a clear link between the results obtained for each measure and its expected outputs and results as illustrated in the Intervention Logic	(Indicators stated per measure)	
			<u>Measures of the EU:</u>	
			<u>SUMPs:</u>	
		50% of cities developed SUMP Increasing temporal trend in SUMP uptake	• Share of cities which have developed a SUMP, are in the process of developing a SUMP, or do not have one (per year and overall), per MS and size	• Desk review: Eltis; The Status of SUMPs in EU Member States (CIVITAS 2020 report, July 2018) • Survey

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		All case study cities use concepts comparable to the EU SUMP concepts as a model for their SUMP.	• Compliance of SUMPs adopted after 2013 with the concepts laid down in the UMP	• Case studies
		Stakeholders' opinions on the extent to which SUMP implementation led to the materialisation of impacts in cities	• Perceived positive impacts of SUMPs on expected outcomes	• Desk review • Case studies • Survey • Targeted interviews with national, regional and local stakeholders
		N/A explorative	• The European Platform on Sustainable Urban Mobility Plans was created	• Desk review: Eltis
		The European Platform on Sustainable Urban Mobility Plans is used across all EU Member States Resources have been uploaded to the Platform across all areas of the UMP Resources available on the platform have been downloaded which cover all areas of the UMP	• Use (visits, downloads, uploads) of the European Platform on Sustainable Urban Mobility Plans	• Desk review: Eltis • Consultations with Eltis managers
		70% of surveyed respondents identify the European Platform on Sustainable Urban Mobility Plans as Very Useful / Useful Consulted stakeholders' opinion regarding the usefulness of the European Platform on Sustainable Urban Mobility Plans	• Perceived usefulness of the European Platform on Sustainable Urban Mobility Plans	• Case studies • Survey • Interviews
		N/A explorative	• Volume of financial support provided to national, regional and local authorities with respect to SUMPs	• Desk review: *Support study on ex-post evaluation of EU financial support to sustainable urban mobility and to the use of alternative fuels in the EU urban areas* • Case studies • Survey • Targeted interviews with national, regional and local stakeholders
		70% of surveyed respondents identify support provided to national regional and local authorities with respect to SUMPs as Very Useful / Useful Consulted stakeholders' opinion regarding the usefulness of the support provided to national regional and local authorities with	• Perceived usefulness of the support provided to national regional and local authorities with respect to SUMPs	

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		respect to SUMPs		
			<u>Coordinating public and private-sector intervention: More action on Urban Logistics:</u>	
		N/A explorative	• Existence of guidance documents developed which provide practical assistance on how to improve urban logistics performance	• Desk review
		70% of surveyed respondents are **aware** of the existence of practical assistance guidelines on how to improve urban logistics performance 70% of surveyed respondents who are aware of the existence of practical assistance guidelines on how to improve urban logistics performance (see previous criterion) also **use** the guidelines Consulted stakeholders' opinion regarding the usefulness of practical assistance guidelines on how to improve urban logistics performance	• Awareness of practical assistance guidelines on how to improve urban logistics performance • Use of practical assistance guidelines on how to improve urban logistics performance	• Case studies • Survey • Targeted interviews with national, regional and local stakeholders
		N/A explorative	• Number of procurement programmes of clean vehicles used for urban logistics	• Case studies • Survey • Targeted interviews with national, regional and local stakeholders • Targeted interviews with EU institutions and agencies
			<u>Coordinating public and private-sector intervention: Smarter Urban Access Regulations and Road User Charging:</u>	
		N/A explorative	• Existence of guidance documents to help cities implement access regulation schemes	• Case studies • Survey • Targeted interviews with national, regional and local stakeholders
		70% of surveyed respondents are **aware** of the existence of guidance documents to help cities	• Awareness of the guidance documents to help cities implement access regulation schemes	• Case studies • Survey • Targeted interviews with

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		implement access regulation schemes		national, regional and local stakeholders
		70% of surveyed respondents who are aware of the existence of guidance documents to help cities implement access regulation schemes (see previous criterion) also **use** the guidance Consulted stakeholders' opinion regarding the usefulness of guidance documents to help cities implement access regulation schemes	• Use of the guidance documents to help cities implement access regulation schemes	• Case studies • Survey • Targeted interviews with national, regional and local stakeholders
		N/A explorative	• Number of UVAR put in place since 2013	• Desk review • Case studies • Survey • Targeted interviews with national, regional and local stakeholders
			<u>Coordinated Deployment of Urban Intelligent Transport Systems:</u>	
		N/A explorative	• Number of new pieces of legislation on access to traffic and travel data at EU level	• Desk review
		N/A explorative	• Number of specifications at EU level on Real-Time Traffic Information and Multimodal Information Services, as foreseen under the framework of the ITS Directive	• Desk review
		N/A explorative	• Level of deployment of vehicle to vehicle and vehicle to infrastructure communication systems in urban areas	• Desk review • Case studies
			<u>Urban road safety:</u>	
		70% of interviewed local authorities are **aware** of good practice examples for road safety planning	• Awareness of good practice examples for road safety planning	• Case studies • Interviews with local authorities
		70% of interviewed local authorities who are aware of good practice examples for road safety planning also **use** these examples as inspiration	• Use of good practice examples for road safety planning	

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		N/A explorative	• Number of reports at EU level analysing measures for reducing the number of serious road traffic injuries in urban areas	• Desk review
			<u>Reinforcing EU support: Sharing experiences, showcasing best-practices, and fostering cooperation:</u>	
		70% of surveyed stakeholders consider a future Urban Mobility Scoreboard (SUMI – sustainable urban mobility indicators) as a relevant resource to have Consulted stakeholders' opinion regarding the usefulness of a future Urban Mobility Scoreboard (SUMI – sustainable urban mobility indicators)	• Opinions of intended future users regarding a future Urban Mobility Scoreboard (SUMI – sustainable urban mobility indicators)	• Case studies • Survey • Interviews
		70% of surveyed stakeholders are aware of the existence of the Member States' Expert Group on Urban Mobility and Transport	• Awareness of the existence of the Member States' Expert Group on Urban Mobility and Transport	• Case studies • Survey • Interviews
		70% of consulted stakeholders who are aware of the Member States' Expert Group on Urban Mobility and Transport consider the EGUM to be useful as it contributes to: • Exchange of best practices and experiences • Improved cooperation and coordination between cities, industry • Strengthened capacities of local authorities to develop and implement SUMPs • Improved territorial cohesion	• Perceived usefulness of the Member States' Expert Group on Urban Mobility and Transport in contributing to the expected outputs and results	• Case studies • Survey • Interviews with Member States authorities
		N/A explorative	• Number of cities taking part in CIVITAS • Share of cities taking part in CIVITAS per total cities in each MS	• Desk research: CIVITAS • Consultations with CIVITAS organisers
		N/A explorative	• Number of CIVITAS projects on urban mobility innovation, split per MS	• Desk research: CIVITAS • Consultations with CIVITAS organisers
		N/A explorative	• Number of CIVITAS events annually	• Desk research: CIVITAS

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		N/A explorative	• Number of participants to CIVITAS events annually, by MS	• Consultations with CIVITAS organisers • Survey
		70% of consulted stakeholders who are aware of CIVITAS consider it to be useful as it contributes to: • New urban mobility research and innovation in cities, with positive impacts	• Opinions regarding the impacts of CIVITAS in cities	
			<u>Sharing experiences, showcasing best-practices, and fostering cooperation:</u>	
		N/A explorative	• Level of funding support attributed to URBACT	• Desk review • Consultations with URBACT programme managers
		N/A explorative	• Number of Working Groups created at EU level to discuss specific issues such as urban access regulations, urban logistics, ITS, or the Urban Mobility Scoreboard	• Desk review
		50% of consulted city-level stakeholders confirm that the best practice examples inspired them to adapt their policies	• Use of best practice examples by cities to get inspired and adapt their policies	• Survey • Targeted interviews with national, regional and local stakeholders
			<u>Focussing research and innovation on delivering solutions for urban mobility challenges:</u>	
		N/A explorative (extent to which common standards and technical specifications for innovative urban transport solutions at EU level)	• Development of common standards and technical specifications at EU level for innovative urban transport solutions	• Desk review
		N/A explorative (extent to which there has been joint and clean procurement for innovative urban transport solutions)	• Facilitation of joint and clean procurement for innovative urban transport solutions	• Desk review
			<u>Measures for the MS:</u>	
		70% of interviewed authorities are **aware** of the framework for supporting the development of clean, safe and efficient urban vehicles for rail and road 70% of interviewed authorities	• Awareness of the framework for supporting the development of clean, safe and efficient urban vehicles for rail and road • Use of the framework for supporting the development of clean, safe and efficient urban vehicles for rail and road	• Case studies • Survey • Targeted interviews with national, regional and local stakeholders • Thematic interviews with

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		who are aware of the framework for supporting the development of clean, safe and efficient urban vehicles for rail and road also **use** this framework		civil society and private sector stakeholders •
		N/A explorative	• Rate of participation in the Smart Cities and Communities – the European Innovation Partnership per MS	• Desk review EIP-SCC website • Consultations with EIP-SCC organisers
		N/A explorative	• Number of urban mobility measures supported by ESI-funds	• Desk review: *Support study on ex-post evaluation of EU financial support to sustainable urban mobility and to the use of alternative fuels in the EU urban areas* • Case studies
		70% of consulted stakeholders are **aware** of the European Urban Mobility Week	• Awareness of the European Urban Mobility Week (among respondents)	• Desk review: EU Urban Mobility Week evaluation • Case studies • Survey • Targeted interviews with national, regional and local stakeholders • Thematic interviews with civil society and private sector stakeholders
		N/A explorative	• Participation in the European Urban Mobility Week (number of municipalities, population participation), development over the years.	•
		All Member States have cities taking part in the EMW	• Distribution among Member States of participating cities	•
		N/A explorative	• Sustainability indicators from the EMW evaluation	•
			<u>Coordinated Deployment of Urban Intelligent Transport Systems:</u>	
		All case study cities which have deployed or are deploying ITS	• Cities use guidelines when key ITS applications are deployed in their	• Case studies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
		applications in their conurbations use guidelines	conurbations	
		N/A explorative	• Existence of interfaces between urban and surrounding interurban transport networks in cities	• Case studies
		N/A explorative	• Level of interoperability of multimodal datasets gathering all information about urban mobility	• Case studies
			<u>Urban Road Safety:</u>	
		N/A explorative	• Amount of available data on road safety indicators	• Desk review
		N/A explorative	• Quality of data on road safety indicators	• Desk review
		All consulted local authorities use data on road safety indicators	• Use of data on road safety indicators by local authorities	• Case studies
	3.4. Which factors have contributed to/hindered the achievement of the objectives?	• Consistency and convergence in stakeholders' opinions	• Opinions of stakeholders on influencing factors hindering or contributing to achievement of objectives	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies • Survey
	3.5. Would the same outputs and results have been realised without the UMP?	• Extent to which evidence suggests that the UMP measures were necessary to the achievement of comparable outputs and results (see also questions on EU Added Value Q21,2).	• Identified counterfactual scenario (baseline) • Opinions of stakeholders on the possibility of having achieved the same outputs and results without the UMP	• Desk review • Baseline scenario assessment • Case studies • Targeted interviews with national, regional and local authorities • Survey
4. To what extent have the concepts and tools	4.1. What actions have been taken by the Member States to actively promote	• Relevant concepts and tools developed at EU level have	**Qualitative indicators:**	• Desk review

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
developed at EU level been actively promoted at regional and local level by the Member States? To what extent have the concepts and tools developed at EU level led to an uptake of integrated urban mobility approaches in the Member States?	concepts and tools developed at EU level at regional and local level? **EU-level concepts and tools:** SUMPs: • SUMPs • European Platform on Sustainable Urban Mobility Plans ELTIS • Funding instruments and other support offered to develop SUMPs Coordinating public and private-sector intervention; More action on Urban Logistics: • Urban logistics concepts, measures and best practice • Guidance documents that provide practical assistance on how to improve urban logistics performance • Procurement of clean vehicles used for urban logistics Coordinating public and private-sector intervention; Smarter Urban Access Regulations and Road User Charging: • Urban access regulations concepts, measures and best practice • Guidance to help cities implement access regulation schemes Urban road safety: • Urban road safety concepts, measures and good practice • Data on road safety indicators Intelligent Transport Systems: • Intelligent Transport Systems concepts, measures and good practice • Traffic and travel data • Real-Time Traffic Information and Multimodal Information Services • Vehicle to vehicle and vehicle to	been actively promoted at regional and local level by the Member States • The majority of responding stakeholders are aware of the different concepts and tools available at different levels (MS, regional, local)	• Identified channels of promotion and information (communications, campaigns, documents, etc.) • Level of stakeholders' awareness regarding the EU concepts and tools. • Geographical differences (=differences between the MS, and between the local levels within one MS) in promotion of EU level concepts and tools by the Member States	• Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	infrastructure communication systems • Guidance of the Urban ITS Expert Group • Interfaces between urban and interurban transport networks • Interoperable multimodal datasets to gather information about UM <u>Reinforcing EU support; Sharing experiences, showcasing best-practices, and fostering cooperation:</u> • Member States' Expert Group on Urban Mobility and Transport • Framework for supporting the development of clean, safe and efficient urban vehicles for rail and road • Framework for supporting the development of clean, safe and efficient urban vehicles for rail and road • Targeted EU financial support • EU research and innovation • EU international cooperation			
	4.2. To what extent have the concepts and tools developed at EU level been **used** in urban mobility policies at local level?	• The majority of responding stakeholders and reviewed documentary evidence indicated which approaches are used and which ones are used most often.	• *Answer to the previous question on use of concepts and tools.* **Qualitative indicators:** • Identified geographical differences (=differences between the MS, and between the local levels within one MS) in UMP measures implemented by the Member States and regional authorities	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Survey • Thematic interviews with civil society and private sector stakeholders
5. How well does the allocation of responsibilities between the EU and Member States reflect the current needs and capacities at local level?	5.1. What are the current needs and capacities at local level with regard to the allocation of responsibilities between the EU and Member States?	• N/A Explorative	**Qualitative indicators:** • Perception of stakeholders on needs and capacity (gaps) at local level with regard to the measures under the responsibility of the EU and Member States (ranking)	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
				• Survey • Open Public Consultation
	5.2. To what extent do **responsibilities for the measures of the UMP from the EU** (such as EU policy frameworks, guidance and standardisation; EU support such as ERDF funding; EU-funded projects e.g. URBACT; EU information platforms and networks, etc.) effectively address current needs and capacities at local level?	• Measures of the UMP **from the EU** adequately reflect the current needs and capacities at the local level.	**Qualitative indicators:** • Alignment between the needs and the capacities of stakeholders at local level with respect to the UMP measures from the EU • Perceptions of stakeholders on whether measures of the UMP from the EU reflect well the needs and capacities at local level	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
	5.3. To what extent do the measures of the UMP **from the Member States and regional authorities** (such as Member States' Expert Group on Urban Mobility, national and regional approaches to Urban Mobility, cooperation platforms, monitoring of local implementation of mobility measures, etc.) reflect current needs and capacities at local level?	• Measures of the UMP **from the Member States and regional authorities** adequately reflect the current needs and capacities at the local level.	• Alignment between the needs and the capacities of stakeholders at local level with respect to the UMP measures from the Member States and regional authorities • Perceptions of stakeholders on whether measures of the UMP from the Member States and reginal authorities reflect well the needs and capacities at local level	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
	5.4. To what extent could measures allocated between the EU, Member States and regional authorities have been allocated differently to better meet the needs and capacities of stakeholders at the local level?	• N/A Explorative	• Identified gaps between local needs and capacities and UMP measures from the EU, the MS, regional authorities identified in Q3.2 and Q3.3. • Opinions of stakeholders on possibilities for improvements	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
	5.5. Which actors or activities (other than under the institutional setting of the UMP) could address better the current needs and capacities at local level?	• N/A Explorative	• Stakeholders' opinion on other actors or activities addressing current needs and capacities at local level better	• Desk review • Case studies • Targeted interviews with national, regional and local authorities

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
				• Thematic interviews with civil society and private sector stakeholders • Survey • Open Public Consultation
6. To what extent do Member State-, regional- and local-level mobility approaches encompass the multiple action areas of the UMP in an integrated set of policies?	N/A	Judgement criterion: • The majority of responding stakeholders and reviewed documentary evidence agree that the used approaches led to development of integrated policies, i.e. all action areas of the UMP are implemented as an interlinked set of policies aiming towards common objectives at national level, Success criterion: • There are more cities that put in place integrated urban mobility policies at local level, compared to 2013.	**Quantitative indicators:** • Number of integrated national approaches to urban mobility as a share of all MS. • Number of integrated national approaches to urban mobility at regional and local level as a share of regions and cities in the case studies • Stakeholders' opinion on development of integrated UM policies at local level	• Desk review • Case studies • Targeted interviews with national, regional and local authorities • Survey • Thematic interviews with civil society and private sector stakeholders
7. To what extent did the UMP contribute to the implementation of measures at national level?	7.1. To what extent did the UMP contribute to encouraging the development of national frameworks supportive of **urban access regulation schemes**, including urban road charging? As well as: • LEZ • Pedestrianised zones • Loading/unloading zones • Congestion zones • Urban road access user charging	• Stakeholder feedback and documentary evidence indicate that the UMP has contributed to encouraging the development of national frameworks supportive of **urban access regulation schemes**, including urban road charging to a large extent • Local and regional authorities refer to national frameworks which helped them design, implement, and evaluate access regulation schemes in urban mobility approaches.	**Qualitative indicators:** • Share of stakeholders that confirm that the UMP contributed to the creation of national frameworks supportive of urban access regulation • Share of stakeholders that confirm that that the UMP contributed to implementation of (more) access regulation schemes **Quantitative indicators:** • Share of MS that developed urban access regulation schemes, including urban road charging revised / designed after the UMP	• Desk research • Case studies • Targeted interviews with national, regional and local authorities • Survey
	7.2. To what extent did the UMP contribute to ensuring **coordinated deployment of ITS** in urban areas on local level? In particular: • (Real-time) Multimodal travel and traffic	• Stakeholder feedback and documentary evidence indicate that the UMP has contributed ensuring **coordinated deployment of**	**Qualitative indicators:** • Share of stakeholders that confirm that that the UMP contributed to urban ITS integration within national sustainable	• Desk research • Case studies • Targeted interviews with national, regional and local

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	information • Traffic management measures • Multimodal smart ticketing • Enforcement through CCTV and ANPR technologies	**ITS** in urban areas to a large extent • Local and regional transport authorities refer to national frameworks which helped them integrate ITS in urban mobility approaches.	urban mobility approaches • Share of stakeholders that confirm that the UMP contributed to more and better implementation of coordinated deployment of ITS **Quantitative indicators** • Share of national ITS deployment plans revised / designed after the UMP as a share of all MS • Share of joint and public urban ITS procurement initiatives undertaken after the UMP	authorities • Survey
	7.3. To what extent did the UMP contribute to increasing the consideration of **urban freight logistics** in national approaches to SUMPs? In particular: • Route optimisation • Loading and unloading zones • Better mode and vehicle selection • Improved load factors	• Stakeholder feedback and documentary evidence indicate that the UMP has contributed to **increasing the consideration of urban freight logistics** in national approaches in SUMPs to a large extent • Functioning of platforms for cooperation, exchange of data and information, training, etc., for all actors of urban logistics chains • Local and regional transport authorities refer to national frameworks which helped them take consideration on urban freight logistics since introduction of the UMP	**Qualitative indicators:** • Share of stakeholders that confirm that the UMP contributed to urban logistics integration within national sustainable urban mobility approaches • Share of stakeholders that confirm that the UMP contributed to more and better implementation of specific urban freight logistics measures **Quantitative indicators** • Share of national frameworks as a share of all MS with proper consideration on urban freight logistics revised/designed after the UMP • Number of platforms for cooperation, exchange of data and information training, etc., for all actors of urban logistics chains implemented after the UMP	• Desk research • Case studies • Targeted interviews with national, regional and local authorities • Survey
	7.4. To what extent did the UMP contribute to ensuring coordination of **road safety aspects** in all steps of the SUMPs planning process on a local level? In particular: • Education and training of road users • Safety of vulnerable road users planning • Emergency and post-injury services	• Stakeholder feedback and documentary evidence indicate that the UMP has contributed to **ensuring coordination of urban road safety aspects in the SUMPs planning process** to a large extent. • Local and regional transport authorities refer to national	**Qualitative indicators:** • Share of stakeholders that confirm that the UMP contributed to urban road safety regulation integration within national sustainable urban mobility approaches • Share of stakeholders that confirm that the UMP contributed to more and better implementation of specific urban road	• Desk research • Case studies • Targeted interviews with national, regional and local authorities • Survey

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	• Use of modern road safety technologies • Enforcement of road safety rules • Safe infrastructure • Safe vehicles	frameworks which helped them take consideration on **road safety aspects** in the SUMPs planning process.	safety regulations **Quantitative indicators:** • Share of reviewed SUMPS with consideration of road safety aspects in the SUMPs • Evidence of road safety data being collected and used for local analysis and road safety planning (in case study cities)	
8. To what extent has the EU financing for urban mobility in 2014-2020 [EU Structural and Investment Funds, Cohesion Fund, Horizon2020 (CIVITAS, TRIMIS, SETIS, EIT KICs, EIB EFSI, ELENA), Connecting Europe Facility, European Fund for Strategic Investment, LIFE] been effective in delivering the expected results of the UMP measures?	8.1. To what extent has the EU financing for urban mobility been used in the Member States at the local/regional level? Differentiating per funding programme: • EU Structural and Investment Funds, • Cohesion Fund, • Horizon2020 (CIVITAS, TRIMIS, SETIS, EIT KICs, EIB EFSI, ELENA), • Connecting Europe Facility, • European Fund for Strategic Investment, • LIFE.	Judgement criteria: • Stakeholder feedback and documentary evidence positively conclude that EU financing for urban mobility contributed to delivering expected results of the UMP • EU financing for urban mobility has been used to finance urban mobility programmes and projects at local/regional level Success criteria: • High level of usage of EU funding programmes for implementing UMP measures • Reported ease in accessing EU funds and in implementing EU-funded projects.	**Quantitative indicators:** • Volume of funds committed for the implementation of UMP related measures, per funding programme • Volume of funds used for the implementation of UMP related measures, per funding programme • Distribution between Member States of funding (if feasible), size of cities etc. • Share of cities responding to survey that used ESIF funding to implement UMP measures **Qualitative indicators:** • Stakeholders' opinion on EU funding programmes contribution to delivering UMP	• Desk research ○ results of evaluations of the funds mentioned *Support study on ex-post evaluation of EU financial support to sustainable urban mobility and to the use of alternative fuels in the EU urban areas* • Case studies • Survey
9. Have there been any unintended positive or negative effects of the UMP?	9.1. Have there been any unintended negative or positive results or impacts from the measures of the UMP?	• Judgement criteria: N/A (Explorative) • Success criterion: no unintended effects have hindered the achievement of the objectives of the UMP	**Qualitative indicators:** • Evidence of negative unintended results or impacts of the measures of the UMP • Evidence of positive unintended results or impacts of the measures of the UMP • Stakeholders' opinions on whether the measures of the UMP have had negative or positive unintended effects	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
				• Open Public Consultation
EFFICIENCY				
10. How efficiently were the UMP measures implemented?	10.1. What benefits have been achieved to date for different stakeholders?	• N/A Exploratory	**Quantitative indicators** • Outputs and results from implemented measures under the four pillars, (identified in Q4, Q7 and Q8) have benefited to specific stakeholders: ○ SUMPs ○ Reinforcing EU support ○ Engagement of Member States ○ Coordinating public and private sector intervention • Distribution of outputs and results among the different stakeholders. **Qualitative indicators:** • Stakeholder opinions on the benefits to different stakeholders stemming from the four pillars: ○ SUMPs ○ Reinforcing EU support ○ Engagement of Member States ○ Coordinating public and private sector intervention	• Desk research (including the *Impact assessment accompanying the UMP Communication*) • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies • Open Public Consultation
	10.2. What costs have been placed on different categories of stakeholders? In particular for: ○ local and regional authorities regarding preparation and implementation and the measures, and ○ for others when it comes to the impact of implemented measures?	• N/A Descriptive	**Quantitative indicators:** • Costs (EUR) associated with the preparation and implementation of individual UMP measures, including: ○ costs to the Member States, regions and cities from activities related to implementing the measures at national, regional and local level ○ costs for the EC for implementation for UMP actions at EU level (e.g. Eltis, URBACT, civitas, EU mobility week, etc.) • Costs to specific stakeholders from	• Desk research (including the *Impact assessment accompanying the UMP Communication*) • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
			activities related to implementing measures (with a focus on organic[372] measures), **Qualitative indicators:** • Stakeholders' opinions on the costs to specific stakeholders from implemented measures' (with a focus on measures that can be directly attributed to the UMP) • Stakeholders' opinions regarding the fairness of costs to different stakeholders	• Targeted interviews with European institutions and agencies
	10.3. What is the relation between the outputs and results derived compared to the costs and resources for implementing the measures?	• **Overall costs** of implementing the measures of the UMP are proportionate relative to their overall benefits identified in Q11 • Costs of implementing **each of the measures** of the UMP are proportionate relative to their benefits identified in Q11	**Quantitative indicators** using ratios of costs/benefits: • Volumes of EU funding allocated to implementing sustainable urban mobility, compared to benefits observed also identified in Q11. **Qualitative indicators:** • Stakeholders' opinions regarding the resources used compared with observed outputs/results • Quantified survey answers (using scoring) allowing for the comparison of costs and benefits of different measures as identified in Q11	• Desk research: *Study to support the impact assessment of the UMP* • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies
	10.4. To what extent have capacity building, technical and financial support options for using existing EU programmes and initiatives improved efficiency of delivery?	• Capacity building, technical support, financial support for using existing EU programmes and initiatives have contributed positively towards increasing efficiency of delivery of the UMP measures	**Quantitative and qualitative indicators:** • Stakeholders' opinion on the contribution of: ○ capacity building ○ technical support ○ financial support to time and resources saved or gained for delivering UMP measures	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders

[372] As defined in Appendix 4 of the Inception Report

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
11. Which measures have been most and least efficient?	11.1. What were the most efficient measures?	• The balance between the outputs and results delivered compared to the costs and resources for implementing the measures (=degree of efficiency) is clearly positive or negative • Level of agreement between stakeholders regarding the most and the least efficient measures	**Qualitative indicators:** • Stakeholders' opinion on the efficiency of different measures (ranking) • Quantified survey answers (using scoring) allowing for the comparison of costs and benefits of different measures as identified in Q11	• Desk research • Survey • Targeted interviews with national, regional and local authorities • Case studies
	11.2. What were the least efficient measures?			
	11.3. What were the main factors influencing the efficiency and inefficiency of those measures	• N/A: Explorative	**Qualitative indicators:** • Stakeholders' opinion on factors contributing to high efficiency of measures, per measure • Stakeholders' opinion on factors hindering efficiency of measures, per measure	
12. To what extent are the costs of the UMP as a whole justified given the benefits which have been achieved?	12.1. Do stakeholders consider that there was a good return on the resources invested into the implementation of the UMP?	• Level of agreement between stakeholders that that there was a good return on the resources invested	**Quantitative indicators:** • Comparison of volumes of EU and Member States' funding allocated to implementing sustainable urban mobility, compared to benefits observed, identified in Q10. **Qualitative indicators:** • Sources of inefficiencies identified in Q11. • Stakeholders' opinion on the return of investment on the resources they invested into implementing the UMP	• Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders
	12.2. Could the same results have been achieved with less funding/lower costs?	• Level of agreement between stakeholders that the same results could have been achieved with less funding/at a lower cost.	**Qualitative indicators:** • Opinions of stakeholders (disaggregated per stakeholder type) on whether the same results could have been achieved with less funding/lower costs.	• Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
13. Is there room to simplify in order to reduce the regulatory burden caused by the intervention?		• Level of agreement between responding stakeholders that there is room to simplify the intervention in order to reduce the regulatory burden from each of the measures	**Qualitative indicators:** • Stakeholders' opinion on regulatory burden of specific measures • Stakeholders' opinion on possible simplifications of the different measures identified. • Stakeholders' opinion on potential scale of simplifications for the different measures.	• Desk research • Survey • Case studies • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies
COHERENCE (internal)				
14. To what extent do the measures proposed in the UMP form a coherent package for supporting local action for better and more sustainable urban mobility?	14.1. To what extent are the **objectives** of the UMP consistent with each other?	• Strong evidence of synergies & complementarity between objectives of the UMP • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives	**Qualitative indicators:** • Alignment between the general objectives of the UMP • Overlaps/inconsistencies between general objective of the UMP • Perception of stakeholders on whether the objectives of the UMP are mutually supportive	• Desk research (reconstruction of the intervention logics) • Targeted interviews with European institutions and agencies • Targeted interviews with national, regional and local authorities • Case studies • Open public consultation
	14.2. To what extent are the **measures** under the four pillars of the UMP: ○ SUMPs ○ Reinforcing EU support ○ Engagement of Member States ○ Coordinating public and private sector intervention of the UMP consistent with each other?	• Strong evidence of synergies & complementarity between objectives of the UMP measures • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP measures	**Qualitative indicators:** • Alignment between the specific objectives/measures of the UMP • Overlap/inconsistencies between specific objectives/measures of UMP • Perception of stakeholders on the consistency of the UMP, by measure • Perception of stakeholders on potential synergies between measures • Perception of stakeholder on potential overlaps or inconsistencies	• Desk research (reconstruction of the intervention logics) • Targeted interviews with European institutions and agencies • Targeted interviews with national, regional and local authorities • Case studies • Survey • Open public consultation
COHERENCE (external)				
15. To what extent is the UMP coherent with and	15.1. To what extent is the UMP coherent with and complementary to national	• Strong evidence of synergies & complementarity between	**Qualitative indicators:**	• Desk research

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
complementary to National, regional and local policies on urban mobility?	Energy and Climate Plans?	objectives of the UMP and the objectives of the national Energy and Climate Plans • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives and the objectives of the national Energy and Climate Plans	• Alignment between the objectives of the national Energy and Climate Plans (where they exist) and the objectives of the UMP • Overlaps, duplications, contradictions, or inconsistencies between the national Energy and Climate Plans (where they exist) and the objectives of the UMP • Perception of stakeholders on the coherence and complementarity between objectives of the UMP and objectives of the national Energy and Climate Plans	• Case studies • Targeted interviews with national, regional and local authorities
	15.2. To what extent is the UMP coherent with and complementary to national Action Plans on alternative fuels?	• Strong evidence of synergies & complementarity between objectives of the UMP and the objectives of the national Action Plans on alternative fuels • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives and the objectives of the national Action Plans on alternative fuels	**Qualitative indicators**: • Alignment between the objectives of the national Action Plans on alternative fuels (where they exist) and the UMP • Overlaps, duplications, contradictions, or inconsistencies between the national Action Plans on alternative fuels (where they exist) and the UMP • Perception of stakeholders on the coherence and complementarity between UMP and national Action Plans on alternative fuels	• Desk research • Case studies • Targeted interviews with national, regional and local authorities
16. To what extent is the UMP coherent with and complementary to national/regional/ local taxation?		• Strong evidence of synergies & complementarity between the tax-related measures of the UMP and national/regional/local taxation? • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the tax-related measures of the UMP and the national/regional/local taxation?	**Descriptive indicators:** • Identification of different types of taxation policies in different Member States, regions and cities, such as road charges, fuel taxes, annual vehicle taxes, etc. in the Member States subject to the case studies **Qualitative indicators:** • Stakeholders' opinion on whether there are synergies & complementarity between the tax-related measures of the UMP and national/regional/local taxation • Stakeholders' opinion on whether there are overlaps, duplications, contradictions, or inconsistencies between the tax-related measures of the UMP and the national/regional/local taxation	• Desk research • Case studies • Targeted interviews with national, regional and local authorities
	16.1. Would better coordination of taxation at EU-level improve its coherence with the UMP, also in the context of the	• N/A Explorative	**Qualitative indicators:** • Stakeholders' opinion whether better	• Targeted interviews with European institutions and

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	2011 Economic Governance Package?		coordination of taxation would improve coherence between EU taxation policy and the UMP.	agencies • Case studies • Targeted interviews with national, regional and local authorities
17. To what extent is the UMP coherent with and complementary to EU policies and programmes on urban mobility, such as the European Mobility Week?	17.1. To what extent are the **format** and **objectives** of the UMP and of other EU policies and programmes on urban mobility coherent and complementary with each other?	• Strong evidence of synergies & complementarity between objectives of the UMP and other EU policies and programmes on urban mobility • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives and other EU policies and programmes on urban mobility	**Qualitative indicators**: • Coherence & complementarity between the ○ format ○ objectives of the UMP and other EU policies and programmes on urban mobility • Overlaps, duplications, contradictions, or inconsistencies between the ○ format ○ objectives of the UMP and other EU policies and programmes on urban mobility • Perception of stakeholders on the synergies between UMP and other EU policies and programmes on urban mobility	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies
18. To what extent is the UMP coherent with and complementary to EU policies and programmes in other fields?	18.1. To what extent is the UMP coherent and complementary with policies regarding: **Transport:** ○ *Sustainable Mobility for Europe:* safe, connected, and clean – allowing all Europeans to benefit from safer traffic, less polluting vehicles and more advanced technological solutions, while supporting the competitiveness of the EU industry ○ *A European Strategy for Low-Emission Mobility* - ensuring a regulatory and business environment that is conducive to meeting the competitiveness challenges that the transition to low-emission mobility implies ○ *High Level Group on the*	• Strong evidence of synergies & complementarity between objectives of the UMP and EU policies and programmes in other fields • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives and EU policies and programmes in other fields	**Qualitative indicators:** • Alignment between the objectives of the UMP and other EU policies and programmes in other fields • Overlaps, duplications, contradictions, or inconsistencies between the UMP and other EU policies and programmes in other fields • Perception of stakeholders on the coherence and complementarity between UMP and other EU policies and programmes in other fields • Perception of stakeholders on potential overlaps, duplications, contradictions, or inconsistencies between the UMP and other EU policies and programmes in other fields	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	Competitiveness and Sustainable Growth of the Automotive Industry in the EU 2017 - developing medium and long-term recommendations to address the main challenges and opportunities for the European automotive industry in the run-up to 2030 and beyond **Climate action:** ○ *2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy* – presenting how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance, or research – while ensuring social fairness for a just transition **Air quality:** ○ *Air Quality Directive* - defining and establishing objectives for Ambient Air Quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole ○ *A Europe that protects*: Clean air for all – supporting and facilitating the necessary measures of the Member States to meet their targets and enforcing actions to help ensure that the common objective of clean air for all Europeans is achieved and maintained **Urban development:** ○ *Pact of Amsterdam* - The Urban Agenda for the EU - promoting cooperation between Member States, cities, the European Commission and other stakeholders, in order to stimulate growth, liveability and innovation in the cities of Europe ○ *United Nations Conference on Housing and Sustainable Urban Development*			

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	Habitat III - securing renewed political commitment for sustainable urban development, assess accomplishments to date, address poverty and identify and address new and emerging challenges **Noise:** ○ *Environmental Noise Directive* - defining a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise **Energy efficiency:** ○ *Energy Efficiency Directive* - promoting energy efficiency within the Union in order to ensure the achievement of the Union's 2020 20% headline target on energy efficiency and to pave the way for further energy efficiency improvements beyond that date **Safety:** ○ *Strategic Action Plan on Road Safety* – to ensure the use of safe vehicles, safe roads and roadsides, and to ensure safe road use and fast and effective emergency response **Social rights:** ○ *European Pillar of Social Rights* - delivering new and more effective rights for citizens **TEN-T:** ○ *TEN-T Regulation* - establishing guidelines for the development of a trans-European transport network comprising a dual-layer structure consisting of the comprehensive network and of the core network, the latter being established on the basis of the comprehensive network. **Alternative fuels/clean vehicles**			

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
	(including levels of emissions): ○ *Clean Vehicles Directive* – to support the introduction of environmentally-friendly vehicles to the broad market **Smart cities:** ○ *Smart Cities & Communities Initiative* – enabling cities to use technological solutions to improve the management and efficiency of the urban environment **Education:** *Erasmus+ EU programme for education, training, youth and sport (emphasis on mobility)* - contributing to the Europe 2020 strategy for growth, jobs, social equity and inclusion – specifically, promoting cooperation and mobility with the EU's partner countries			
19. To what extent is the UMP coherent with the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy?		• Strong evidence of synergies & complementarity between objectives of the UMP and the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy. • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the UMP objectives and the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy.	**Qualitative indicators:** • Alignment between the objectives of the UMP and the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy. • Overlaps, duplications, contradictions, or inconsistencies between the UMP and the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy. • Perception of stakeholders on the coherence and complementarity between UMP and the 2018 European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, and with the 2016 Low-emission mobility strategy. • Perception of stakeholders on potential overlaps, duplications, contradictions, or inconsistencies between the UMP and the 2018 European strategic long-term vision for a prosperous, modern, competitive and	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
			climate neutral economy, and with the 2016 Low-emission mobility strategy.	
20. To what extent SUMP has been coherent (integrated) with other planning instruments, in particular in the energy, climate and spatial planning fields?	20.1. To what extent have SUMPs integrated the objectives and measures, scenarios, sources of funding, monitoring and assessment processes, etc. used in other planning instruments, such as energy, climate and spatial planning instruments?	• The responding stakeholders identify elements of other planning instruments in SUMPs • Strong evidence of integration between SUMPs and other planning instruments, creating synergies & complementarity • No/limited evidence of integration between SUMPs and other planning instruments	**Quantitative indicators:** • Number/share of reviewed SUMPs which refer to other planning instruments **Qualitative indicators:** • Stakeholders' opinion whether SUMPs are integrated with other planning instruments • Stakeholders' opinion whether the integration of SUMPs and other planning instruments creates synergies & complementarity	• Survey • Case studies • Targeted interviews with national, regional and local authorities
21. At local level, to what extent implementation of UMP measures have been coherent with other policy areas (such as public health)?		• Strong evidence of synergies & complementarity between implementation of UMP measures and other policy areas (public health, education, social etc.) at local level • No/limited evidence of overlaps, duplications, contradictions, or inconsistencies between the implementation of UMP measures and other policy areas (public health, education, social etc.) at local level	**Qualitative indicators:** • Number/share of reviewed SUMPs that make reference to other policy areas • Opinion of stakeholders on whether implementation of UMP measures have been coherent with other local policy areas	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Open Public Consultation
22. How consistent are the different departments and levels of governance with each other with regards to implementation of the UMP measures?		• Strong evidence of consistency in the implementation of UMP measures between different departments and levels of governance • No/limited evidence of overlaps and/or inconsistencies in the implementation of UMP measures between different departments and levels of governance	**Qualitative indicators:** • Stakeholders' opinion on whether the different departments and levels of governance are consistent with each other • Stakeholders' opinion on whether the different departments and levels of governance overlap and/or are inconsistent with each other	• Desk research • Case studies • Targeted interviews with national, regional and local authorities
EU ADDED VALUE				
23. What is the added value resulting from the UMP, compared to what would have been	23.1. What approaches and frameworks would Member States have adopted to promote urban mobility in the absence	• The responding stakeholders identify possible national approaches and frameworks (if any) which Member States	**Qualitative indicators:** • Stakeholders' statements about possible or planned approaches and frameworks which	• Desk research • Case studies

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
achieved at Member State, regional and/or local level?	of the UMP?	would have developed in the absence of the UMP. • The responding stakeholders identify possible national approaches and frameworks (if any) which Member States would have continued to develop in the absence of the UMP. • There is a clear incremental effect of the UMP identified in the baseline analysis	would have been developed in the absence of the UMP. • Stakeholders' statements about approaches and frameworks which would have been continued in the absence of the UMP. **Quantitative and qualitative indicators** of the UMP's effectiveness versus the hypothetical counterfactual scenario	• Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies
	23.2. How has action taken at EU level as part of the UMP contributed towards the following aspects beyond what MS would have achieved on their own? • Development of new urban mobility concepts/tools • Sharing of experiences and good practices across borders • Improved co-ordination and cooperation among actors at different levels (local/regional/national) • Interoperability & consistency of measures/solutions at national and EU level • Level of financial support towards urban mobility measures	• The responding stakeholders agree that Member States' national approaches and frameworks would not have achieved the listed aspects in the absence of action taken at EU level as part of the UMP.	**Qualitative indicators:** • Stakeholders' opinion about what EU action enabled them to do, beyond what they could achieve by themselves. **Quantitative and qualitative indicators** of the UMP's effectiveness versus the hypothetical counterfactual scenario	• Desk research • Case studies • Survey • Baseline scenario assessment • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with European institutions and agencies
24. To what extent do the issues addressed by the Urban Mobility Package continue to require action at the EU level?	24.1. To what extent do the issues addressed by the UMP still persist?	• See Q1 and Q2.	• See Q1 and Q2.	• See Q1 and Q2.
	24.2. Is there still need for action at EU level to support: • the development of new urban mobility concepts and tools • sharing of experiences and good practices across borders (in relation to SUMPs and individual measures) • improved co-ordination and cooperation among actors at different levels (local, regional, national)?	• The responding stakeholders agree that the absence of action at EU level would contribute to negative trends in the development and implementation of urban mobility approaches and overall negative trends in urban mobility in the EU (congestion, pollution, etc. see Q1.1). • Comparison between the	**Qualitative indicators:** • Stakeholders' views on the need to continue EU-level action to avoid negative trends • Stakeholders' views on the need to continue EU-level action to ensure consistent implementation of measures and effective policy frameworks across the EU • Stakeholders' views on the need to continue EU-level action to achieve additional benefits	• Desk research • Case studies • Survey • Targeted interviews with national, regional and local authorities • Thematic interviews with civil society and private sector stakeholders • Targeted interviews with

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods

	• interoperability of measures/solutions at national and EU level?
	• integration and consistency of urban mobility measures with EU-wide policy frameworks/international policy commitments?
		evidence showing the positive contribution of the UMP to improvements on the listed aspects (see Relevance - Q4.1) and the evidence indicating that problems, needs and their drivers still persist	**Qualitative and quantitative indicators:**
			• Evidence collected from Effectiveness questions regarding:
			  • Contribution of the UMP to the listed aspects (see Q4.1)
			• Evidence collected from Relevance questions regarding:
			  • Persistence/existence of (new) problems related to urban mobility, needs of stakeholders, drivers contributing to these
				European institutions and agencies

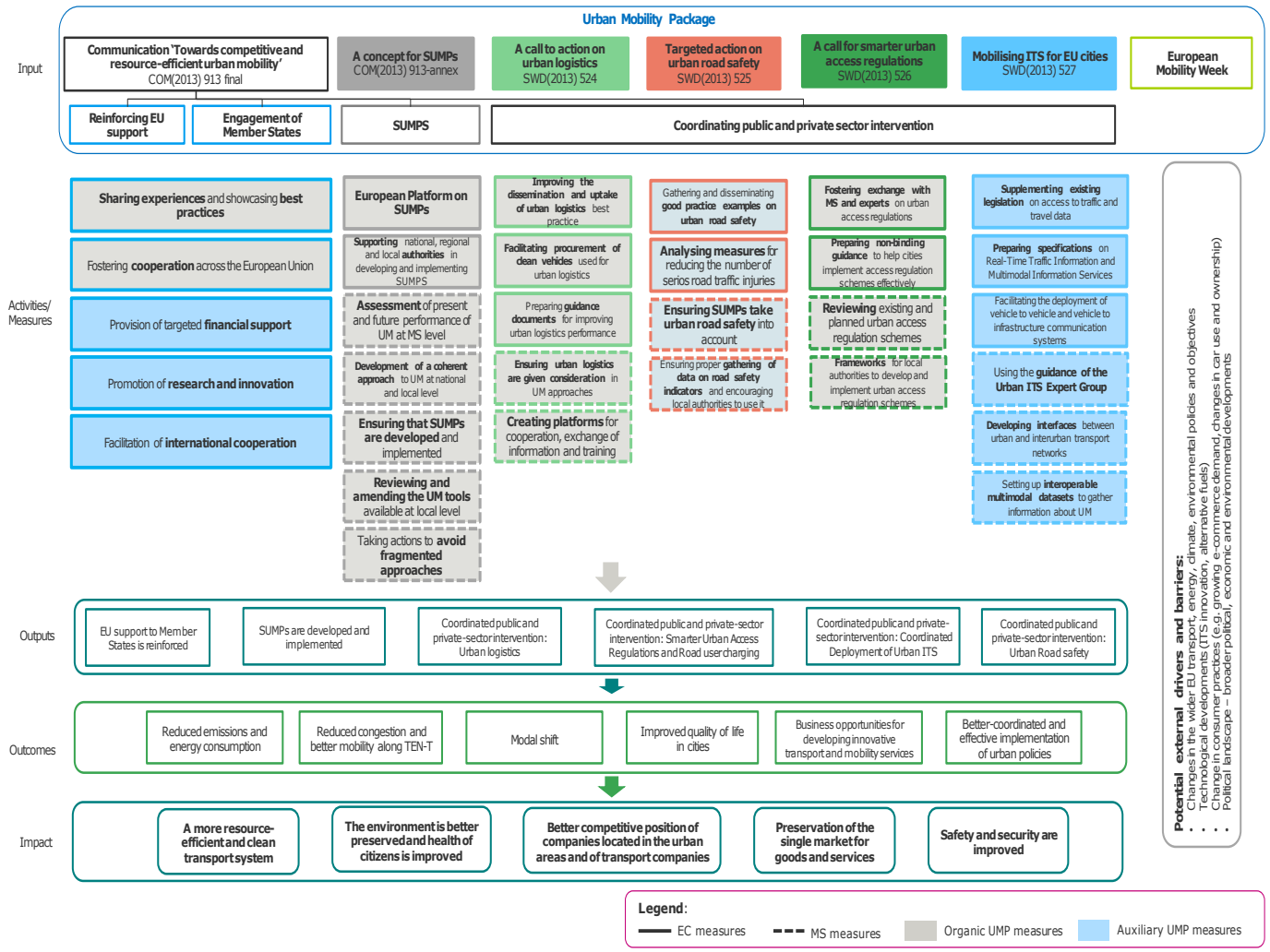
25. What would be the most likely consequences of stopping EU action to sustain the issues addressed by the Urban Mobility Package?	25.1. Are appropriate frameworks and support structures in place at national/regional level to support the development and implementation of the urban mobility measures?	• Existence of frameworks and support structures in place at national/regional level, which responding stakeholders identify as appropriate to support the development and implementation of urban mobility measures (based on answers to Effectiveness - Q6).	**Qualitative and quantitative indicators:**
			• Evidence collected from Effectiveness questions (in particular Q6) regarding:
			  • Existence of frameworks and support structures in place at national/regional level
			  • Appropriateness of frameworks and support structures in place to support the development and implementation of urban mobility measures
				• Desk research
				• Case studies
				• Survey
				• Baseline scenario assessment
				• Targeted interviews with national, regional and local authorities
				• Thematic interviews with civil society and private sector stakeholders
				• Targeted interviews with European institutions and agencies
				• Open Public Consultation

	25.2. Would withdrawal of EU support (in terms of coordination, R&D activities, funding, events) have any negative impact on:
	• Level of financing/investment on urban mobility measures
	• Implementation/effectiveness/efficiency of the urban mobility measures
		• N/A: Explorative	**Qualitative evidence:**
			• Stakeholders' opinion on whether withdrawing EU support would lead to:
			  • Interruption of the spread of sumps
			  • Slower innovation due to interrupted EU financing and support
			  • Slower implementation of public mobility projects due to interrupted EU financing and support
			  • Fewer exchange of European expertise and technologies within the EU and with other countries and regions
			  • Inconsistency/incoherence of urban mobility measures in the Member States, regions and cities	

	25.3. Would there be any benefits from withdrawing existing EU intervention?	• N/A: Explorative	**Qualitative evidence:** • Stakeholders' opinion regarding possible benefits from withdrawing the UMP.	• Targeted interviews with national, regional and local authorities • Thematic interviews with

Evaluation questions	Sub-questions	Judgement (success) criteria	Indicators/Descriptors	Data sources & methods
				civil society and private sector stakeholders • Targeted interviews with European institutions and agencies

ANNEX 4: ARCHITECTURE OF THE URBAN MOBILITY PACKAGE



ANNEX 5: OVERVIEW OF POLICY AREAS THAT ARE DIRECTLY OR INDIRECTLY LINKED TO URBAN MOBILITY

THE TEN-T REGULATION AND ITS ASSOCIATED CEF FUNDING INSTRUMENT (CONNECTING EUROPE FACILITY)

Trans-European Transport Network (TEN-T)

The Trans-European Transport Network (TEN-T) policy addresses the implementation and development of a Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and railroad terminals. The ultimate objective is to close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU. The current TEN-T policy is based on Regulation (EU) No 1315/2013.

Besides the construction of new physical infrastructure, the TEN-T policy supports the application of innovation, new technologies and digital solutions to all modes of transport. The objective is improved use of infrastructure, reduced environmental impact of transport, enhanced energy efficiency and increased safety.

TEN-T comprises two network 'layers':

- The Core Network includes the most important connections, linking the most important nodes, and is to be completed by 2030.
- The Comprehensive Network covers all European regions and is to be completed by 2050.

The backbone of the Core Network is represented by nine Core Network Corridors, which were identified to streamline and facilitate the coordinated development of the Core Network. Two horizontal priorities, the European Rail Traffic Management System (ERTMS) and Motorways of the Sea complement these. Oversight of the Corridors and of the two Horizontal Priorities lies with European Coordinators, nominated by the European Commission.

Urban nodes and urban mobility

Given TEN-T's aim to close gaps and remove bottlenecks across the European continent-wide transport network, the integration of urban nodes and urban areas is vital.

The current TEN-T guidelines recognise and formalise the role of urban nodes in the TEN-T transport networks as important hubs that facilitate the flow of people and goods. In addition, they are also connected to freight and passenger transport, being the major centres for production and consumption. Maximising the potential of this vital funding stream will ensure that urban nodes are able to meet current and future challenges, while providing smart, efficient and sustainable transport. Grants such as the CEF are an essential part of this and enable cities and metropolitan regions to play their role as efficient urban nodes in the TEN-T network.

CEF

The Connecting Europe Facility (CEF) finances projects which fill the missing links in Europe's energy, transport and digital backbone. In the 2014-2020 period, INEA will manage

CEF projects worth €22.4 billion to promote clean, smart, sustainable and fully interconnected transport in Europe. Part of the CEF funding covers better connections between the trans-European transport network near cities (ports, airports, railway stations, logistic platforms and freight terminals) and the regional and local transport network. Projects mitigating the impact of transit transport on urban centres, as well as promoting efficient low-noise and low-carbon urban freight delivery are part of the CEF funding scheme.

The ITS Directive

Intelligent Transport Systems (ITS) can significantly contribute to a cleaner, safer and more efficient transport system. A new legal framework (Directive 2010/40/EU) was adopted on 7 July 2010 to accelerate the deployment of these innovative transport technologies across Europe. This Directive is an important instrument for the coordinated implementation of ITS in Europe. It aims to establish interoperable and seamless ITS services while leaving Member States the freedom to decide which systems to invest in.

Under this Directive the European Commission has to adopt within the next seven years specifications (i.e. functional, technical, organisational or services provisions) to address the compatibility, interoperability and continuity of ITS solutions across the EU. The first priorities will be traffic and travel information, the eCall emergency system and intelligent truck parking.

The Commission already took a major step towards the deployment and use of ITS in road transport (and interfaces to the other transport modes) on 16 December 2008 by adopting an Action Plan. The Action Plan suggested a number of targeted measures and included the proposal for this Directive The goal is to create the momentum necessary to speed up market penetration of rather mature ITS applications and services in Europe.

The initiative is supported by five co-operating Directorates-General: DG Mobility and Transport (lead), DG Communications Networks, Content & Technology, DG Research & Innovation, DG Enterprise and Industry and DG Climate Action.

ITS and urban mobility

Intelligent Transport Systems (ITS) supports urban policy goals in areas such as travel information, traffic and demand management, smart ticketing or urban logistics. An integrated approach is even more required in urban areas, including various transport modes and combining both technical and policy issues. Both the Action Plans on ITS and on Urban Mobility include complementary activity on ITS for urban areas.

THE AMBIENT AIR QUALITY DIRECTIVES AND THE SUBSEQUENT CLEAN AIR POLICY PACKAGE IN 2013, COMPLEMENTED BY THE CLEAN AIR FOR ALL COMMUNICATION IN 2018

The EU has been working for decades to improve air quality by controlling emissions of harmful substances into the atmosphere, improving fuel quality, and by integrating environmental protection requirements into the transport, industrial and energy sectors. The aim is to reduce air pollution to levels which minimise harmful effects on human health and the environment over the EU territory. Air pollution travels across national boundaries so coordination at EU level is important. EU law leaves the choice of means to comply with limit values agreed at EU level to the Member States. For key sources of pollution, EU-level standards are applied to ensure efficient internal market functioning.

Clean Air Policy Package in 2013

The 2013 Clean Air Programme for Europe reconfirmed the objective to achieve full compliance with existing air quality standards across the EU as soon as possible and set objectives for 2020 and 2030. As such, EU policy efforts rest on three main pillars:

- The first pillar comprises the ambient air quality standards set out in the Ambient Air Quality Directives for ground level ozone, particulate matter, nitrogen oxides, dangerous heavy metals and a number of other pollutants.
- The second pillar consists of national emission reduction targets established in the National Emissions Ceiling Directive for the most important trans-boundary air pollutants: sulphur oxides, nitrogen oxides, ammonia, volatile organic compounds and particulate matter.
- The third pillar comprises emissions standards for key sources of pollution, from vehicle and ship emissions to energy and industry. These standards are set out at EU level in legislation targeting industrial emissions, emissions from power plants, vehicles and transport fuels, as well as the energy performance of products.

'Clean air for all' communication

In 2018, The Commission adopted a Communication "A Europe that protects: Clean air for all' that provides national, regional and local actors with practical help to improve air quality in Europe.

The communication also referred to the transport related measures to further reduce emissions which can aim at technical improvements, behaviour change and demand management (e.g. promoting cleaner modes of transportation via urban planning), or at infrastructure investment (e.g. for alternative fuelling or public transport). To support authorities in taking these measures, the European Commission presented two Mobility packages and provides non-binding guidance with recommendations and best practices. These packages include as well events such as the European Mobility Week campaign, often culminating in a car-free day, can be a useful tool to raise awareness of the benefits of clean air through walking and cycling.

THE REVISED CLEAN VEHICLES DIRECTIVE

The revised Clean Vehicle Directive (Directive (EU) 2019/1161) promotes clean mobility solutions in public procurement tenders, providing a solid boost to the demand and further deployment of low- and zero-emission vehicles. The new Directive defines "clean vehicles" and sets national targets for their public procurement. It applies to different means of public procurement, including purchase, lease, rent and relevant services contracts. Adopted by the European Parliament & Council in June 2019, the Directive needs to be transposed into national law by 2 August 2021.

The Directive applies to cars, vans, trucks and buses (excluding coaches), when they are procured through:

- Purchase, lease, rent or hire-purchase contracts under obligations by EU public procurement rules (Dir. 2014/24/EU and 2014/25/EU)
- Public service contracts for the provision of passenger road transport services (Reg. 1370/2007)

- Services contracts for public road transport services, special-purpose road passenger-transport services, non-scheduled passenger transport, refuse collection services, mail and parcel transport and delivery (Annex I of the Directive).

THE ALTERNATIVE FUELS INFRASTRUCTURE DIRECTIVE

The Clean Power for Transport package of 2013 aims to facilitate the development of a single market for alternative fuels for transport in Europe. It contains:

- A Communication laying out a comprehensive European alternative fuels strategy [COM(2013)17], for the long-term substitution of oil as energy source in all modes of transport;
- A proposal for a Directive on the deployment of alternative fuels recharging and refuelling infrastructure [COM(2013)18];
- An accompanying Impact Assessment [SWD(2013)5];
- A Staff Working Document setting out the needs in terms of market conditions, regulations, codes and standards for a broad market uptake of LNG in the shipping sector [SWD(2013)4].

The final Directive, as adopted by the European Parliament and the Council on 29 September 2014 following the inter-institutional negotiations:

- Requires Member States to develop national policy frameworks for the market development of alternative fuels and their infrastructure;
- Foresees the use of common technical specifications for recharging and refuelling stations;
- Paves the way for setting up appropriate consumer information on alternative fuels, including a clear and sound price comparison methodology.

Alternative fuels in urban environments

The Directive strengthens the use of alternative fuels and connected infrastructure in urban areas. It is very relevant to cities as electricity and hydrogen are particularly attractive power sources for the deployment of electric/fuel cell vehicles in urban/suburban agglomerations and other densely populated areas, as they contribute to improving air quality and reducing noise.

The Directive explicitly requires (in Article 4(1)) Member States ‘that an appropriate number of recharging points accessible to the public are put in place by 31 December 2020, in order to ensure that electric vehicles can circulate at least in urban/suburban agglomerations and other densely populated areas, and, where appropriate, within networks determined by the Member States.’