MORE
Multimodal Optimisation of Roadspace in Europe

Road space re-allocation

Streets as contested spaces

The findings reported in this deliverable reflect the state of knowledge up to their first submission date. A revised version will be submitted in August 2021 that will include more recent material.

Start date of project:	**1st September 2018**	Duration:	**36 months**

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Checked by:	**Peter Jones (UCL)**
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Summary

This report is the third WP2 deliverable. Drawing on the work done on the organizational, institutional, regulatory and political dimensions of road space allocation, it focuses on the contestation of street space.

By purposefully using the notion of contestation, it sets out to identify various views on how space should be allocated across different transport modes and non-transport activities, as well as the various ways through which they are made material. Who has an interest in contesting road space arrangements or proposed changes? What are these claims about? How are they mobilized? To what extent are these claims channelled by formal consultation and decision-making processes? What similarities can be found across cities? How are these views represented at EU level?

Drawing on an original qualitative dataset, the report includes an up-to-date analysis of how the contestation of street space enfolds across five cities - London, Constanta, Malmö, Lisbon and Budapest - and at EU level. This contributes to the understanding of transition management in the transport policy domain, from a car-oriented transport policy perspective towards the development of new policy approaches, such as one favouring sustainable mobility and over the recent period, place-making. It complements the work done by other partners at project level and contributes to the conceptualization, at project level, of urban roads as an ecosystem. The detailed, supporting analysis for each of the five cases is made available through “city portraits” in this report’s appendices, together with two sets of recommendations of how existing EU and Member states legislation should be revised in order to accommodate cycling.

Cross-city findings confirm both to the socio-political significance of streets, even for mundane interventions such as parking regulations, cycle lanes or changes to lane widths, and to the relevance of a more systematic analysis of the politics of road space allocation. As such it contributes to the existing literature on transport policy, planning and decision-making.

Yet exploring the motivations and approaches for contestation also sheds light on the various ways through which street space contestation operates in the context of EU multilevel governance. First, it confirms that the politics of road space re-allocation requires reconciling diverging interest groups and perspectives on the future of roads. Second, a variety of tactics and strategies are developed in order for public authorities, across levels of government, private and commercial actors, non-governmental organizations and citizen, to influence the development and implementation of road space allocation strategies. The framing of the issue, as opposed to existing governance arrangements, is critical in order to account for the choices. Third, empirical findings from across the five cities confirm that evolving relationships between those advocating new approaches to road space allocation and those resisting such changes depend on the local authorities' capacity for innovations in governance such as consultation and deliberative processes for example. This helps understand, beyond institutional, organizational and political factors, some similarities and differences across cities in terms of involving the wider public alongside technical experts, planners and elected officials, and the trade-offs and tensions between different transport modes and activities.

More importantly, the report confirms the instrumental role of street space contestation in order to overcome some of the institutional, organizational and regulatory barriers that were identified at earlier stages of research. In other words, street space contestation contributes over time to strengthening governing capacities at the urban level and constitutes, as such, a major driver for road space re-allocation and the shift towards cities as places.

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Prepared by: **Charlotte Halpern (Sciences Po), Jenny McArthur (UCL), Francesco Sarti, Juliette Thijs (Sciences Po, CEE)**

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Table of Contents

Table of Illustrations

1 Introduction

The development of new, alternative, diverse road uses challenges existing forms of allocating space[1] on urban road networks. The focus on single transport modes or user groups when designing and managing road space neglects the critical role of the road network in urban life. A wide variety of interactions take place in urban roads and enabling traffic is not their sole purpose. A wider range of users such as motorists, pedestrians, cyclists, public transport, delivery operators, etc. increasingly challenge this one-dimensional approach to designing and managing the urban road network. They actively support the development of alternative road uses, such as recreational activities, as well as a multidimensional approach that considers health, climate change, urban planning or economic development issues.

Nevertheless, different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. These differing views are made material through the claims that are made by a wide range of stakeholders about the allocation and use of road space. What are these claims about? How are they mobilized? To what extent are these claims channelled by formal consultation processes? What similarities can be found across cities? How are these views represented at EU level? While some actors may promote the shift from roads as traffic-enabling infrastructure to a multifunctional urban asset, others resist this transformation.

By purposefully using the notion of contestation, this report assumes that claims about the future of roads' functions and uses contribute to reshaping the politics of space allocation as well as the ability of existing institutional arrangements and policy processes to accommodate such claims. It contributes to the work done in the MORE project[2] by providing an analysis of the politics of road space allocation. It complements the analysis done on the organizational, institutional and political (D2.1, Halpern & McArthur 2019) as well as the regulatory (D2.2, Morgan, 2020) dimensions of road space allocation. A brief reminder of the MORE project is introduced in the following paragraphs, followed by a presentation of this report's main objectives.

1.1 Streets as ecosystems

The MORE project proposes conceptualizing urban roads as an ecosystem that is, as multi-functional, multi-users and multi-level spaces (Jones & al., forthcoming). This is done by shifting the attention from core network corridors to streets, from enabling traffic flows to accommodating multiple, diverse, inter-related flows and activities. This holistic approach is

[1] Throughout this report, road space refers to all transport thoroughfares, from local streets to major highways. For a clarification on terminologies, and in particular, roads versus streets, see Curtis and Jones (2019) and for a thorough presentation of the MORE project, see the D2.1 report (Halpern & McArthur, 2019).

[2] Multimodal Optimisation of Road space in Europe (MORE), funded under the European Union's Horizon 2020 Research and Innovation programme (2018-2021), grant agreement n°769276. See the European Commission's TRIMIS website: https://trimis.ec.europa.eu/project/multi-modal-optimisation-road-space-europe (last consulted 15/06/2019).

grounded into a changed perspective of the road network, which challenges existing functions associated with the road network – traffic movement or place-making – as well as road classifications by distinguishing between roads and streets[3].

The MORE project sets out to:

- Identify existing and future pressures (demographic change, technological advances) on the main roads in cities that connect the Urban Nodes – and their major attractors (City centre, port, etc.) – with the TEN-T (Transport European Road Network).

- Develop design tools and processes that will enable these key routes to be designed and planned in a way that make them responsive to future pressures, in a flexible manner, by exploiting possibilities for dynamic space management and operation.

This 18-partners' consortium is led by Pr. Peter Jones, University College London and draws on a wide range of expertise.

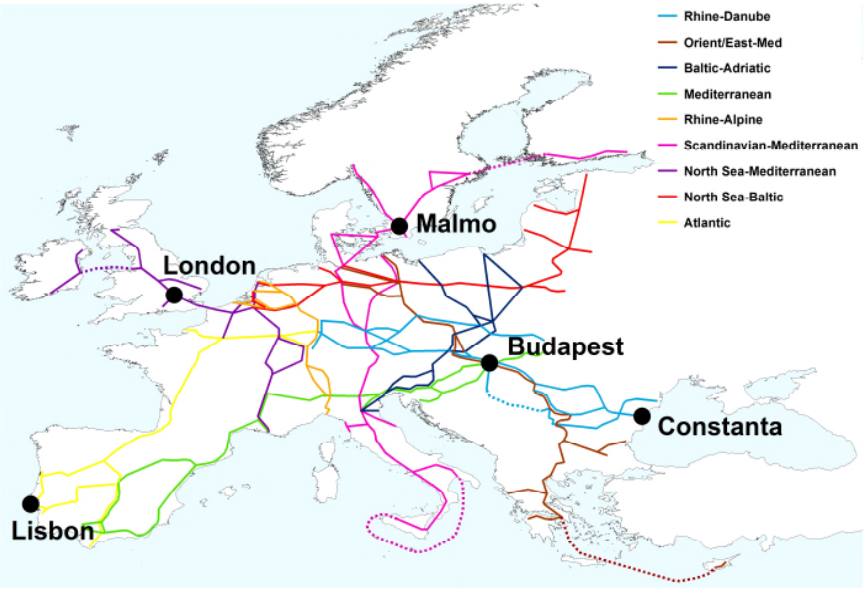
1.2 Similar challenges, different strategies

Such developments are examined in the context of five European cities (see map below), which range in size from around 300,000 inhabitants to over 8 million. Together, they interact with six of the nine TEN-T European road corridors[4] and are strategically linked to key international rail, port and air hubs. They handle a complex mix of commuters, transit, freight, passengers, residential, business and tourist traffic. They share similar challenges of multi-sector stakeholder and governance structures, congestion challenges and limited road space to accommodate contesting uses and users. This is particularly exacerbated in TEN urban feeder routes. By contrast to other WPs, where the largest share of the technical work focuses on specific corridors in cities, this report examines city-wide strategies about road space allocation. This is further completed by the attention given to debates currently taking place at EU level about access, mobility and public space.

While these developments are likely to affect the planning, design, operation and management of urban roads across cities, they also raise specific institutional, organizational and political issues and more specifically, issues of governance and contestation.

[3] This is further developed as part of the work done in WP5.
[4] i.e. Atlantic, North Sea-Mediterranean, Scandinavian-Mediterranean, Mediterranean, Orient East-Med, & Rhine-Danube

Map 1: MORE case study cities in the context of the TEN-T network



Source: MORE project, Grant agreement, Part B.

1.3 Organizational, institutional, regulatory and political factors: Work Package 2 in brief

Work Package 2 contributes to the MORE project by examining the governance and contestation of road space (see Figure 1a & 1b below)[5]. It seeks to understand how TEN feed urban routes "land" in cities and an urban environment, and the challenges this raises from a governance and a public policy perspective. WP2 contributes to the conceptualization, at project level, of urban roads as an ecosystem by combining three different perspectives:

- Users, interests, claims - the different elements of the street, and the mobile (or immobile) people or vehicles that move through or occupy road space;
- Modes of regulation - the relations between the political, economic, environmental and social systems in which these people or vehicles are operating within;
- Forms of urban governance - the ability of urban governments to steer processes of road space re-allocation by reshuffling priorities and shaping their effective integration into policy processes and practices.

Furthermore, it seeks to highlight context-specific developments as well as similarities between cities.

[5] This work is complementary to the understanding of user needs, policies and guides (WP1) and the analysis of future scenarios on evolving patterns of demand (WP3).

Work package 2 sets out to produce three studies:

- Understand institutional, organizational and political responsibilities (T2.1);

- Explore existing types of traffic regulation (T2.2);

- Identify (new) demands for and challenges with alternative, more diverse street uses (T2.3)

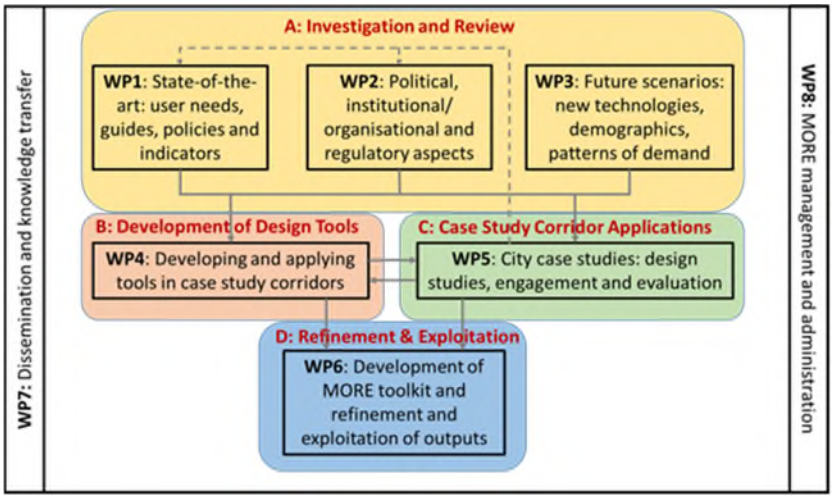
This report presents key findings from Task 2.3 and constitutes the third WP2 deliverable. It draws from the work undertaken as part of Tasks 2.1 and 2.2[6]. Task 2.3 was led by C. Halpern (Sciences Po, CEE) and J. McArthur (UCL) with contributions from all city partners and the support from EIP, Polis, ECF, IFP, UITP and IRU.

Task 2.3: Streets as contested spaces: claims, mobilizations.

Leader: Sciences Po; Partners involved: UCL, TUD, EIP, IFP, Polis, IRU, ECF, all city partners.

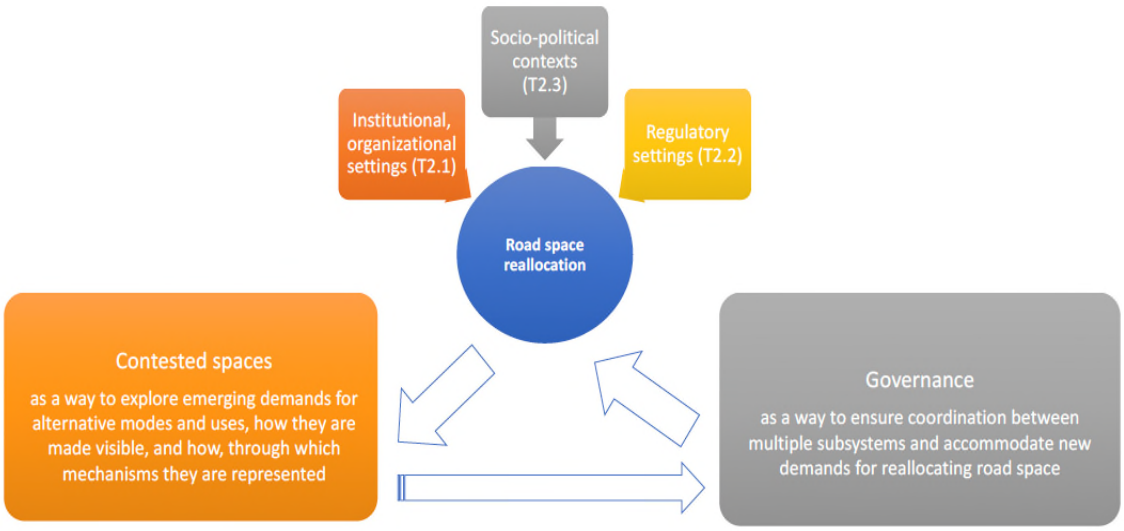
Duration: 10 months (May 2019-January2020)

Figure 1a: MORE project's work-package structure



[6] For an up-to-date analysis of major institutional, organizational and political factors shaping the design and implementation of urban road space allocation strategies across the five cities, see Halpern & McArthur (2019). See Deliverable 2.2 (Morgan 2020) on all aspects related to regulatory issues, including enforcement. See also Deliverable 1.2, led by TUD, on the analysis of processes for management, design and construction; as well as processes for developing guides (who initiates, validates, what status that is, more or less binding etc.).

Figure 1b: Overview of WP2



Source: C. Halpern, MORE project kick-off meeting, Brussels, 2018.

Drawing on the work achieved the governance of road space (D2.1), this section of the research focuses on the political dimensions of road space re-allocation in cities.

1.4 Street space contestation: the report's main objectives

Streets, roads and public spaces have social, cultural and political significance, as well as fulfilling a functional role in cities. Their governance and uses has long been subject to contestation and politicisation. This is particularly the case in cities, where limited space and capacity often implies changes in road space allocation as well as prioritising between different uses, modes and activities. As a result, the reallocation of road space in cities involves the wider public alongside technical experts, planners and elected officials, to deliberate over the desired use of street space, and negotiate the trade-offs and tensions between different transport modes and activities.

While a first stream of research focused on the governance arrangements that characterized road space allocation by exploring its organizational, institutional and political dimensions, this report's central line of inquiry is to understand why and how different actors contest street space. How is contestation made material (claims, mobilizations)? To what extent is it (or not) channelled by formal decision-making and policy processes? Is it successful in shaping current strategies for re-allocating road space?

This report lays the groundwork for a more systematic analysis of the politics of road space allocation. It examines the who's, what's, why's and how's of contestation and politicisation.

The notion of contestation is used purposefully in order to examine conflicts and resistances, as well as the stakeholders' management procedures introduced by local authorities in order

to accommodate these demands. It identifies the range of actors and their interactions within arenas for decision-making and planning. In doing so, it highlights the various repertoires (i.e., lobbying, protest, media, etc.) used in order to make such claims and demands visible onto the agenda and to influence decision-making about road space re-allocation. It also seeks to understand how, in a context of the EU multi-level governance, these interest groups strategically combine multiple venues in order to achieve their respective goals.

More specifically, the report examines the following questions:

- Users, interests, issues - Which stakeholders contest current arrangements about road space allocation?
- Claims, mobilizations - What are these claims about? How are they mobilized?
- Decision-making and policy processes - To what extent are these claims channelled by formal consultation processes?

While these mobilizations are likely to affect the planning, design, operation and management of urban roads at city level, they also shape current debates at EU level on access, mobility and public space.

This report purposefully uses the notion of street space contestation in order to examine conflicts and resistances, as well as the stakeholders' management procedures introduced by public authorities at city level in order to accommodate these demands.

In terms of data collection and analysis, the report draws on an original dataset about why and how road space allocation has emerged as a major public policy issue both across the five cities and at EU level. It examines the ways through which these claims are made material as well as the various ways through which they are accommodated in the policy making process.

1.5 Outline

The report is organized in four sections. *First* it develops a literature review about street space contestation; *Second* it introduces the conceptual framework and the methodology used in order to examine street space contestation across the five MORE cities; *Third*, it discusses cross-city findings as well as the relevance of street space contestation for the understanding of road space re-allocation dynamics.

The detailed, supporting analysis is made available in the report's appendices through five "city portraits"[7] and two sets of recommendations of how existing EU and Member states legislation should be revised in order to accommodate cycling.

[7] The City portrait for London (Annex 6) will only be included in August 2021, together with an updated version of this report.

2 Street space contestation: a literature review

To support our conceptual framework about street space across the five MORE cities (Budapest, Constanta, Lisbon, London and Malmo), this section reviews existing literature and empirical studies of the politics of urban road space re-allocation. Published work spans across a range of disciplines, geographies, and political contexts. Current debates over transport, framed in the context of sustainable development, do not engage with the political factors that are central to decision-making outcomes (Keblowski et al. 2019). This literature review begins by examining motivations for contesting street space (Why). It continues with the main actors that are analysed in the literature as being involved in street space contestation (who), followed by the tactics and strategies they use (how). Lastly, it examines relationships between contesters and state authorities.

This study on contestation is timely as scholars have called for renewed attention to the underlying value judgements and socio-political implications of transport in cities.

2.1 What are the motivations for contesting street space?

The motivations for contestation are numerous and interlinked. They are not necessarily directed to the specific plan per se, like a street space reallocation project, but rather to pre-existing themes related to the plan. The main urban and mobility contestations are based on the protection of the environment, fears of gentrification, citizens' desire to have a democratic control over the transformation and use of their city and local space, a lack of public consultation, social well-being and equality concerns, and finally the economic value or the cost of the plan.

2.1.1 Historically-situated motivations for contesting street space

People's motivations to contest mobility issues have changed over time. For example, the transformations between 1915 and 1930 in the United States changed the street space from one characterised by diverse actors to one dominated by cars where children were no longer allowed to play in the street and pedestrians behaviours were restricted. Streets were socially transformed from motorists being perceived as "intruders" during the first quarter of the 20th century as they were seen as obstructing pedestrians from moving freely, to pedestrians being framed as "jaywalkers" who did not behave according to city motor traffic rules.

Streets were then physically transformed with the widening of car street space and the narrowing of pedestrian paths. This transition happened through disputes and collaborations between street actors including pedestrians, businesses, engineers, the police, children and automobile clubs (Norton, 2008). In fact, streets are political and economic spaces as they are configured according to values and beliefs which nourish and are nourished by people's

understandings, perceptions and discourses on urban space (Rooney, 2016). The battle for street space is one where groups fight for what they believe is the right way this space should be structured. Often, mobility contestations englobe much wider multi-dimensional problems such as the rights of indigenous peoples, feminism, fear of change and personal attachment to an existing street space design, rather than just the proposed technical changes like changing the street curb or the width of a street.

2.1.2 Environmental protection

Citizens are increasingly demanding the provision of more ecologically responsible modes of transportation such as cycling (Stehlin, 2015; and Legacy and Van den Nouwelant, 2015). Environmental protection motivations are also linked to citizens' concerns over the impact of unnecessary construction work and the destruction it will cause to the direct environment like forests and shores (Durnova, 2018; Iveson, 2013 and Sosa López, 2017). In addition, these motivations encompass concerns of air pollution caused by the emission of greenhouse gases emitted by vehicles, notably on people's health (Wolf and Van Dooren, 2017) and the desire to see a new approach in planning that tackles climate change and the impacts of environmental change and pollution on the local and global scale (Sosa López and Montero, 2018; and Leontidou, 2006).

2.1.3 Gentrification

Some citizens also fear that new plans will lead to gentrification, which is a social phenomenon that is characterised by the regeneration of a neighbourhood which leads to the replacement of the inhabitants by more economically and socially prosperous classes. The examples of gentrification retrieved in this literature review were in the United States and European cities mainly. Gentrification does occur unevenly around the world, and it has taken place in the Global South notably due to the global process of urban value extraction, financial capital mobility, entrepreneurial urban policies and the lack of available land in comparison to rapid city expansions (Lees et al., 2015).

The notion of gentrification should be understood in a pluralistic manner as trajectories are different according to time and space. Gentrification can occur because of, for example, a housing redevelopment project that pushes existing residents out of the neighbourhood (Hubbard and Lees, 2018 and Díaz Orueta, 2007). Another common example is the construction of cycle lanes in lower class neighbourhoods. These attract young upper social classes that slowly take over spaces inhabited by less wealthy people, thus creating gentrified neighbourhoods (Wild et al, 2018 and Lubitow et al., 2016). As Vith and Mossner (2017) show, in the United States, bicycling is in fact promoted due to the economic benefits it has by keeping well-educated, young and mobile workforce in the area. This has therefore led to suspicion by residents of lower income neighbourhoods due to the fear notably of displacement.

Just and fair sustainability are demands that must be included in urban planning which tends to be framed in an apolitical and technocratic way (Lubitow and Miller, 2013). This is caused by a multitude of reasons. First, sustainable development is composed of three pillars - environmental protection, social equity and economic development - with the "social equity" one which tends to be poorly incorporated. Secondly, the development, implementation and

enforcement of sustainability and environmental protection policies has led to the exclusion of people in these processes according to their income, race and religion. Finally, the concept of fair and just sustainability refers to the concept of environmental justice which seeks to ensure that no social group is disproportionately affected by harmful environmental impacts (Jefferson et al., 2012). Thus, just and fair sustainability seeks to reconcile environmental goals and social equity.

2.1.4 "Right to the city"

A rising discourse of the "right to the city" and its "livability" has become an emerging motivation for contestion. The term was coined by Lefebvre in 1968 and has recently been reclaimed by social movements around the world. The first movements defend the idea that people should have the democratic control on how their cities are planned and managed, rather than the city being shaped for the profits of a few. This movement occurs in cities where there are formal processes for the public to get engaged and participate in consultation, but they do not lead to a real accountability and do not deliver the desired results. The second defends that the city needs to provide communities with a better quality of life like the improvement of the natural environment, social stability, equity, educational opportunities and cultural events.

These movements focus on ideas of collective power and on the common right and freedom that ordinary citizens have to shape the city. Indeed, neoliberalism has blurred the relationship between the state and the private sector in some states in the mobility sector with the privatisation of public transport systems and increasing public-private partnerships for mega-urban projects (Legacy, 2018). Participation tends to be deeply limited with engagement channels that are depoliticised by giving citizens only the ability to respond to existing design plans or giving control to the private sector of the information emitted by these platforms (Ibid.). The ideas of these movements are visible through demands of more localised and inclusive patterns of mobility such as a widespread accessibility to public transport (Stehlin, 2015; Stehlin and Tarr, 2017; Durnova, 2018; Dodman 2009; Legacy and Van den Nouwelant, 2015; and Verlinghieri and Venturini, 2018), the desire of residents to stay in their neighbourhood even when it is being redeveloped through the "right to a home and community" (Hubbard and Lees, 2018), the need for local empowerment in times of trans-national and transformative processes (Leontidou, 2006; Iveson, 2013; and Sosa López and Montero, 2018) and residents attachment to a local space they do not want to see be transformed (Behrsin and Benner, 2017).

In terms of mobility, the right to circulate is also a motivation in face of the domination of cars in streets[8]. Conflicts between drivers, pedestrians and cyclists occur over normative issues like rights and responsibilities, worthiness of different identities, justice, social acceptance and the common good for example (Conley, 2014). The street is a political space of civic and public interactions where one's legitimacy of belonging and worthiness is disputed. In the United Kingdom, the "utility" of transport modes has directed mobility paradigms (time spent, distance, cost, efficiency, etc) thus marginalising cycling as an irrational mode (Aldred,

[8] See also the work done as part of the CREATE projects on motivations to contest the dominant role of cars in streets (Halpern, 2018)

2015b). The mode is rather seen as being linked with leisure, health, pleasure and child's play. However, when cyclists are on the road, they are expected to perform the same way as motorists do by riding fast and avoiding other vehicles (Larsen, 2017). Cycling is after all seen as an identity, a community, as being a part of the city, living shared emotions and experiences and in the fight against car domination (Freudendal-Pedersen, 2015).

2.1.5 Social well-being, redistribution and equality

Social well-being, redistribution and equality are a motivation for contestation. This can be linked to the failure of a plan to include socially disadvantaged and excluded social classes like lower-income, disabled, women, children and elderly, ethnic minorities and sometimes rural citizens (Hubbard and Lees, 2018; Aldred, 2016; Lubitow et al., 2016 and Uysal, 2012). Concerns over existing poor living conditions and economic insecurity of people are also a motivation of contestation (Mitlin, 2018; and Nicholls and Beaumont, 2004). Another perspective that nourishes contestations is racial discrimination where black and minority ethnic groups tend to be disproportionately affected by mobility and urban plans that do not meet their needs, destroy housing and local amenities through gentrification and redevelopment projects , and that can be based on racial prejudices (Hubbard and Lees, 2018. Sheller, 2015). In addition, social welfare and inequality overlaps with another motivation for contestation: the financial dimension of projects. The economic value of a project can be used to promote an alternative like cycling lanes. They are the main example of an infrastructure that is demanded by actors and is justified with the economic value it will bring (Stehlin, 2015; and Stehlin and Tarr, 2017). In addition, an alternative plan can be drawn out because it has more economic sense than the one that is contested (Connolly, 2019). Finally, the cost of a project is often used as a strong contestation point (Durnova, 2018; Trapenberg Frick, 2016; and Dodman, 2019).

2.1.6 Lack of public consultation

In relation to the technical implementation of urban plans, the lack, inefficient or absence of consultation of the general public is a cause of contestation. A project can be approved in a unilateral way without community engagement by the state or a private entity which can cause a sense of dissatisfaction and frustration from the general public. Sometimes there is a process of consultation but it is unfair and does not incorporate the statements made by citizens into the plan. The lack of consultation can be due to an upcoming election which accelerates the signing of the contracts (Legacy and al., 2017 and Legacy, 2016) and leads to public and media scrutiny. The lack of consultation can nourish fears of gentrification (Díaz Orueta, 2007), of the destruction of historical spaces (Van den Ende and Van Marrewijk, 2019) and of the privatisation of infrastructure (Sosa López, 2017 and Connolly, 2019).

There are also cultural and historical factors that can explain why some countries have processes that are more participatory than others like in the Czech Republic where participation lags due to the legacy of the post-communist state (Durnova, 2018). Nevertheless, some states that belonged to the Soviet bloc had already strong civil society organisations since the 1950s like in Hungary and Romania who questioned the Communist party and promoted pluralistic ideas and reforms. After the democratic transition, in Hungary, environmental organisations emerged against the ecological damage of mega projects (the Danube Circle) and housing movements focused on homelessness and housing

privatisation. Social movement quickly became well-respected and integrated organisations (Pickvance, 2000). In Romania, movements were more restricted and the transition in 1989 was much more violent due to the oppressive Ceausescu regime. There were a few civil society organisations during the regime like the Free Workers' Union and the Romanian Democratic Action (Pickvance, 2000)

What are the main motivations for contesting street space allocation?

(i) Environmental protection; (ii) Gentrification (iii); "Right to the city"; (iv) Social well-being, redistribution and equality; (v) Lack of public consultation

2.2 Who contests street space ?

A wide spectrum of stakeholders, both governmental and non-governmental, contest mobility and urban projects (Boudreau, 2017). There is rarely one stakeholder involved, but rather there is a mix of public, private and third sector actors organised in competing or collaborative ways. Three main categories are outlined below: citizens, organized civil society groups and public authorities.

2.2.1 A word of caution

Two important points are to be kept in mind following this review of "who" involves in street space contestation. First, when notions of "contesting groups" and "civil society organisations" are mentioned, they take up a western-centric definition. In fact, as Lewis (2002) shows, these terms can be used in non-western states but they need to be reworked according to the cultural, historical and political context of each state. These are not ahistorical concepts that are static but rather are linked with both local and international structures and processes.

Second, this literature review also suggests that street space contestation mainly results from the relationships between citizen and civil society organizations citizen on the one hand, and state authorities on the other hand. More precisely, street space contestation is mainly analysed as a result of socio-political contestations. This leaves aside other categories of stakeholders that were identified during the first stage of research as part of WP2 as playing a critical role in street space contestation across the five MORE cities, namely local authorities, business actors and experts. These stakeholders will need to be reintegrated in order understand the politics of road space allocation. This raises both conceptual and empirical issues in the context of this study.

2.2.2 Citizens mobilizing on an ad hoc basis

Citizens mobilise themselves on an ad hoc basis to defend their common interests in formal or informal ways. They tend to create groups that's sole purpose is to contest a specific project or plan. For example, eleven leaseholders in the Southwark Council (London) formed the Aylesbury Leaseholders Action Group defending their "right to remain" as they were going to be unjustly evicted by a private redevelopment project (Hubbard and Lees, 2018). This urban plan did not, amongst others, ensure the provision of social housing and it

breached the rights of the leaseholders. Similar cases are discussed in Chicago (Lubitow et al., 2016) and in Sydney (Legacy et al., 2017).

In another angle, contesting citizens can be at the origin of the creation of much wider and stronger movement, like the Green Ban movement in Sydney in the 1970s. It was initiated by the work of a few suburban women who were against a housing project that would destroy the foreshore (Iveson, 2013). They managed to get construction workers, unions, professionals, feminists, aboriginal black power activists, academics and many other groups on board by using a discourse of "the people" fighting for their "right to the city". Other cases where citizens activism led to the creation of organisations include the campaign "Public Transport No Traffic" in Melbourne which started with a group of concerned citizens and community-based groups (Legacy, 2016), in Madrid with the Red de Colectivos de Lavapiés, a network composed notably of residents of the neighbourhood and their associations, citizen associations linked to immigrants and squatters and cultural groups (Díaz Orueta, 2007) and in Amsterdam with the "Above grounders", an alliance of residents, state officials and politicians, against the project of building the North-South metro line that would cause urban damage (Van den Ende and Van Marrewijk, 2019).

Today, citizens can bring together a range of actors that would not usually mobilise jointly through the use of digital networks. For example, in the United States, conservative citizens showed their opposition to regional urban planning in Atlanta, Georgia and the San Francisco Bay Area through the internet and created echo chambers of like-minded citizens. This led to tactical but unusual coalitions of Tea Party, Property rights and Progressive Left activists who were against the project (Trapenberg Frick, 2016).

2.2.3 Associations, NGOs and advocacy groups

A second category of actors involved in contestations are pre-existing associations, NGOs and advocacy groups. In general, there are three ways these organisations are structured amongst each other. The first case occurs when an organisation is contesting a project alone. For example, the San Francisco Bicycle Coalition which was founded in the 1970s was the only entity defending the implementation of bicycle lanes on Valencia Street and Market street in San Francisco in the late 1990s (Stehlin, 2015).

The second case is when a diversity of organisations exists but do not form an alliance. They either work independently of each other or they create very loose collaborations. This can be illustrated by the contestation of a planned highway connected to the ring road of Antwerp in Belgium. Three action groups proposed different alternatives and focused on specific issues. The first organisation (Straten-Generaal) defended that the proximity to the city center of the new road would halt the city's urban development and their solution was to propose an alternative trajectory. The second organisation focused on the danger of fine particles from cars' exhaust fumes and was against the increasing number of cars. The third organisation proposed first to cover the existing ring road before any new infrastructure was built. This led to different approaches and desired results thus no real collaboration occurred between the organisations (Wolf and Van Dooren, 2017). Other similar cases exist in London (Aldred, 2016), Philadelphia (Sheller, 2015) and in Auckland (McArthur, 2016).

The third, and most common design, is the creation of a wider umbrella organisation encompassing a range of mobilised smaller organisations. For example, in Istanbul, to fight an urban regeneration of project in the Romani neighbourhood of Sulukule, existing NGOs like the Sulukule Association of Advancement of Romani Culture and Solidarity, the Human Settlements Association and the Accessible Life Association, with the help of locals and independent activists, created the Sulukule Platform to bring all these non-governmental actors together (Uysal, 2012). It is an organisation with no hierarchical structure that co-organised events, meetings, festivals, exhibitions and demonstrations. Although they did not manage to stop the urban plan from going through, and land dispossession, evictions and demolitions did take place, they were supported internationally notably by the UNESCO and by a number of public bodies like the Chamber of Architects. They had a strong voice through the Platform and it gave them the possibility to be visible through events and social media campaigns. Other examples of umbrella organisations exist in the Czech Republic (Durnova, 2018), Malaysia (Connolly, 2019), Jamaica (Dodman, 2009), Australia (Legacy and Van den Nouwelant, 2015; Legacy, 2016), Spain (Díaz Orueta, 2007), Brazil (Verlinghieri and Venturini, 2018), the Netherlands (Van den Ende and Van Marrewijk, 2019) and Mexico (Sosa López, 2017).

2.2.4 Public authorities and state-local competition

Thirdly, the state is involved in contestations not only as an entity that is contested, but also one that contests, supports groups and belongs to alliances. In Melbourne, local government councils located near the contested plan of building an inner-city road tunnel were part of the contestation which led to legal challenges, local government made submissions to the independent assessment committee and the opposition party threatened to destroy the contracts if they were elected at the state election (Legacy, 2016). In a completely different perspective, the state and more specifically city administrations, can be the main opposing force to a contestation. In the Czech city of Brno, local elites and the city administration wanted to move the Brno Railway Station outside of the city after the mayor established a re-allocation plan. The opposition to this plan was organised under the umbrella campaign “Railway Station in the Centre” made up of planners, Green Party members and political activists who believed that the station should stay where it is for environmental and social reasons (Durnova, 2018).

In fact, the state is often the initiator of mobility and urban plans, thus it is more current to see local councillors and parties of the opposition getting involved in contestations. Other similar cases where the governing party’s opposition is involved in contestation are described in the United States (Trapenberg Frick, 2016), Brazil (Verlinghieri and Venturini, 2018) and the Netherlands (Van den Ende and Van Marrewijk, 2019).

2.3 Tactics and strategies for contestation

To contest, actors use a range of tools that vary according to their objectives and that are shaped by their strategy and tactics. They can be traditional or innovative, legal or not, direct or indirect, create a dialogue with public and private bodies or rather be based on tactical alliances against them. Both traditional media networks are used like newspapers and broadcast TV channels, but also increasingly social media to communicate, diffuse and

organise. Together, they account for the emergence of action repertoires that reflect varying degrees in the intensity of the dispute.

2.3.1 Events and communication to inform or/and mobilise the general public

The main tools used by actors that are visible in almost all contestations are events geared towards the general public. These include one-off events like “pop-up” protected bike ways on Bike to Work Day to support changes of road corridors in San Francisco (Stehlin and Tarr, 2017) or festivals with music performances, art, screenings and festivals like in Istanbul (Uysal, 2012). However, the most common events are public meetings, campaigns, training sessions and public testimonies (Trapenberg Frick, 2016; Connolly, 2019; Legacy and Van den Nouwelant, 2015: and Verlinghieri and Venturini, 2018) and less commonly the creation of a physical space for citizens to get engaged in the contestation, like in Chicago (Lubitow et al., 2016).

In addition, most contestations are present on digital networks and social media, as well as on traditional media outlets. The internet is used to create websites, blogs, write emails, do online networking, plan events, create online petitions and polls, publish content on Youtube, Twitter and Facebook (Trapenberg Frick, 2016; Aldred, 2016; and Connolly, 2019). Alternatively, platforms can be used to produce un-conventional decentralised expertise and establish new narratives (McArthur, 2016). Groups around the world have adopted a new tactic by becoming “expert-citizens” in order to gain the same legitimacy as governmental actors like in Mexico where NGOs pair both disruptive and technocratic methods (Sosa López and Montero, 2018). The internet has also enabled the creation of “hacktivists” (hackers and activists) and cyber groups that are new forms of activism present in contestations (Leontidou, 2006).

2.3.2 Discussions with public bodies, local authorities and the government

A second strategy actors use to contest is to establish discussions and collaborations with public bodies, local authorities and the government. Organisations can match their goals with them and reinforce the work of the government like in Philadelphia where NGOs initiated strong bicycle promotion campaigns whilst bicycle lanes were being built (Sheller, 2015). These actors can also start a dialogue and discussions with the government (Wolf and Van Dooren, 2017; Díaz Orueta, 2007; Verlinghieri and Venturini, 2018; and Sosa López and Montero, 2018), create committees to collaborate (Legacy and Van den Nouwelant, 2015: and Nicholls and Beaumont, 2004), contact their local or national representative to contest a plan (Lubitow et al., 2016 and Dodman, 2009).

In addition, they can contest plans in consultation meetings (Behrsin and Benner, 2017) or get support from public bodies like the Sulukule Platform in Istanbul which was supported by Turkey’s Chamber of Architects, the Chamber of City and Regional Planners as well as the UNESCO (Uysal, 2012). In contrast, in countries like Denmark, cycling has been normalised and is included vastly in public policy. Radical grassroots organisations do not exist as government enables a sense of cyclist community, notably through events and well maintained infrastructure. Cycle associations tactics are based on ‘softer’ strategies like advocacy events, creating cycling communities on social media, reaching out to people who do not usually cycle through bicycle lending libraries (Freudendal-Pedersen, 2015a).

2.3.3 Legal tools

A fourth, less used, but strong strategy is legal tools and the use of courts. A CPO (Compulsory Purchase Order) public inquiry in a redevelopment plan in London Southwark Council was used by leaseholders to show that it failed to; ensure the provision of social housing, explore refurbishment instead of demolition, do an Equality Impact Assessment and did not promote social well-being (Hubbard and Lees, 2018). The leaseholders won the case and the CPO was not approved by the inspector which gave the residents the power to negotiate. In other cases, the court was used to show how plans were impacting negatively citizens like the displacement of the railway of Brno in Czech Republic to a neighbourhood in the outskirts that was going to be affected. They won the case in the High Court of Administration in 2009 (Durnova, 2018). A similar case occurred in Jamaica where residents showed in the Supreme Court that a new private toll road impeded on their right to the enjoyment of their property, but they lost the case (Dodman, 2009).

2.3.4 Tactical alliances

As discussed in the previous section, contesting actors can create tactical alliances. These can be very atypical, like the alliance of Conservative activists with Sierra Club Georgia in the Atlanta sales tax battles as both actors were against the project but not for the same reasons (Trapenberg Frick, 2016). Another example is the Green Ban Movement in Sydney in the 1970s where middle class women, construction workers and a variety of activities like feminists, gay liberationists and aboriginal black power activists came under the same “the people” banner to fight against various large-scale urban developments (Iveson, 2013). More traditional alliances do exist, like in Melbourne, where neighbourhood associations, public transport advocacy groups, Royal Park saving advocates, NIMBYs, academics and planning students came together against a road infrastructure project (Legacy et al., 2017).

2.3.5 Illegal or nonviolent radical direct action

Tactics and strategies used to contest can also be illegal like squatting (Leontidou, 2006) or the creation of permanent camp neighbourhoods affected by an urban plan (Sosa López, 2017). Using illegal or nonviolent radical direct action is also a manner of creating manufactured “vulnerability” with activists hanging, locking or trying themselves to stop projects from going forward. This captures significant public attention (Doherty, 1998). These organisations tend to be informal, anti-hierarchical, unbureaucratic and have a strong shared identity. Recent work done on the climate movement and environmental protest groups suggests that these forms of actions, which had been marginalized since the late 1980s in favour of advocacy work and expertise, have been taken up again by a new generation of activists and organizations, such as Extinction Rebellion, in the context of the “new climate politics” (Docherty, Hayes 2018).

Promoting road space reallocation leads to a variety of influence-seeking strategies ranging from all the way to events and communication to inform or/and mobilise the general public, discussions with public bodies, local authorities and the government, legal tools, tactical alliances and illegal or non-violent radical direct action.

2.4 Contesting groups and public authorities' relations

In this section, we look at how contestations influence state processes for the planning and implementation of transport schemes. These vary according to the context, history and country these contestations take place in. In many of the study cases explained through this report, contesting groups did exert influence on various levels.

2.4.1 Impact of contestation groups on public authorities

Contesting organisations have managed to alter projects designs and their implementation strategies and the way they are implemented to better suit their interests. In Belgium, the Flemish government had to redo the planning process of a highway that would be connected to the Antwerp ring road and conduct an Environmental Impact Assessment following the advocacy of three action groups (Wolf and Wouter Van Doore, 2017). An alternative example is the implementation of a Bus Rapid Transit in Oakland (USA) where the discontent of two groups lead to changes in the project layout with a bus station being designed in another location or the rerouting of an accident-prone intersection (Behrsin and Benner, 2017). Another example of how groups changed project designs and implementation strategies through their contestation is to be found Rio de Janeiro, where some NGOs demanded the "right to mobility" and managed to freeze transport ticket prices and force the City Council to investigate on its establishment (Verlinghieri and Venturini, 2018). In London, a leaseholder group in London managed to block the Compulsory Purchase Order and open negotiations with the developer (Hubbard and Lees, 2018).

Moreover, through their contestations, organisations have managed to increase their accountability, means of participation and collaboration with the planning actors. This can be illustrated with an example in Madrid where a network of organisations fought against the redevelopment of their neighbourhood, Lavapies, and managed to create a unique dialogue with the administration due to their representative capacity. In fact, the state cooperated with the squatters who were ignored beforehand (Díaz Orueta, 2007). In another example, in Amsterdam, due to the taboo of building metro lines in the city created by strong historical contestations, the state had established for its new metro project the North-South line (1995-2018) an "open" communication strategy to gain the external trust of the general public. They particularly used multimedia platforms, open-days and excursions (Van den Ende and Van Marrewijk, 2019).

Thus, to respond to community resistance, the state and public authorities more generally had to use more inclusive and societal practices to gain legitimacy.

2.4.2 Collaborative relations between contesting groups and public authorities

In certain cases, the influence is not from one group to the other, but is rather defined by a strong collaborative relationship. In Denmark, for example, there are no radical contestation groups focused on cycling. The considerable cycling infrastructure built by public authorities depoliticizes the mode by generating a sense that cycling is culturally acceptable, time effective and accessible to all (Larsen, 2017). Cycling is ingrained in traffic law and policies, and generally favoured over other modes like private vehicles (Freudendal-Pedersen, 2015). In addition, Danish NGOs work side by side with the government to advocate for the uptake of cycling without being defensive or in opposition with the public authorities (Freudendal-

Pedersen, 2015a). In a different context, NGOs in Philadelphia (US) created synergies with governmental organisations and managed to increase bike ridership by coordinating infrastructure construction and campaigns (Sheller, 2015). In Kenya and South Africa, the transition of state regimes to more democratic forms has led to an increase in accountability and collaboration with contesting civil society organisations despite persevering contentions (Mitlin, 2018). Finally, in Vigo (Spain), urban movements have become ingrained in urban planning as citizens were active in public debates, proposal submission and participation since the 1970s. They were supported by the urban elites who managed to coordinate these demands despite the changing elected leaders who were in office (Martinez, 2011).

2.4.3 No impact of contestation groups on public authorities

The impact of contestation should not be overestimated. In a number of cases, the state and the various levels of government did not get influenced by contesting groups, often because public authorities impeded on public participation. In Gdansk in Poland, civil society organisations related to urban planning and mobility are mainly ignored or rejected by the city's planning office (Badach et al., 2018). A similar case happened in Turkey where, despite the substantial mobilisation of contesting groups and the international traction they gained, they failed to stop the redevelopment of the Sulukule neighbourhood by public authorities for tourism and investor purposes. Houses were demolished and residents unfairly displaced due to the Romanis' lack of legal proof of land ownership (Uysal, 2012). In other cases, government's fear that their legitimacy is being questioned. In Australia, the Green Ban movement of the 1970s angered local and national politicians who felt like their authority was being undermined. The Master Builders Association deregistered the main workers' union that was core to the movement which led to the dismantle of the Green Ban in 1974 (Iveson, 2014). This movement gave the authority to the people to make decisions about urban development.

In some cases, the failure of contesting groups is not directly related to the state's strategy to exclude contesting groups. The lack of success can be related to a failure of civil society organisations to reimagine a viable alternative like in Jamaica where the contested Portmore toll road was built despite the legal court cases and boycotts organised (Dodman, 2009). Failed contestation can also be cause by the depoliticisation of the issue that leads to large consensuses in participatory procedures. This is the case in France where mobility policies are framed using a moral register that emphasises on individual responsibility. Alternative views are generally absent from discussions as most agree that transport modes need to be "safe, sustainable and healthy", terms used in a pedagogical manner by the government to justify their urban plans (Reigner and Brenac, 2019).

2.4.4 Electoral cycles and vote

This additional section focuses on the main ways through which outsiders and elected officials interact. This is particularly important for two reasons. Contested projects can change the political landscape of a city or country through elections by removing from office officials or parties that were supporting or contesting a politicised project. The role of ecological and green parties is particularly critical in the European context (van Haute 2016). The work done as part of the CREATE project on sustainable urban transport transitions demonstrated their role as critical in fostering the development of strong political alternatives

and that of sustainable urban development agenda across European cities (Halpern op.cit.). Whether acting as a strong vocal political minority or as a member of ruling coalitions, green parties and elected officials have contributed to a changed approach to transport and mobility, often in cooperation with civil society organizations.

In most cases, a contested project that takes magnitude will have an impact on elected officials. In Auckland, for example, a small number of strong advocacy groups had an influence on the 2017 transport manifesto proposed by New Zealand's elected Labour coalition government. In addition, these groups reshaped the transport policy discourse in Auckland by notably including sustainable mobility (McArthur, 2018). This form of influence was also visible in London with cycling advocacy groups politicising the issue which impacted the 2012 mayoral elections where all five main candidates endorsed their campaign "Go Dutch" and the 2014 local elections (Aldred, 2016).

In some mobility and urban planning projects, an election can completely cancel a project like in Melbourne where an inner-city road tunnel deemed a 'done deal' by elected officials without public consultation was cancelled after the Labour party won the election, replacing the Liberal Government. Indeed, groups were contesting the plan and preventing it from being signed before the national election. The labour party declared they would scrap the plan if they won and they did (Legacy, 2016). A similar case occurred in Brno (Czech Republic) where Green Party members who was against the displacement of a train station like most of the population won a great number of votes at the local election. They put one of their leaders as vice mayor and restarted negotiations with the opposition party in favour of the plan (Durnova, 2018). On an even greater scale, contesting groups can have an impact on national representatives like in Perth (Australia), where they managed to get the highway extension "Freight Link"s impact assessment rejected by the Supreme Court and create a Senate Inquiry on the project. This lead to the transport minister's resignation (Legacy et al., 2017).

Finally, the leadership skills and will power of an elected official are essential in the outcome of contested plans. In Vancouver, for example, a controversial bike lane initiative on the Burrard Street Bridge was not a success in 1996 when the center-right pro-business and pro-car elected leaders had a negative perception of the project from its inception. The trial was a disaster. However, in 2008, the new mayor did the trial again and it was a success notably due to his positive attitude towards sustainable transportation and his ability to take it upon himself to champion the controversial project through a unique project design and window of opportunity (Siemiatycki and Walks, 2016).

2.5 Lessons from the literature review

Several lessons can be drawn from this literature review on the "why, who and how" of people and organisations contesting schemes of street space reallocation.

Main lessons from the Literature review

- The motivations of people and organizations contesting schemes of street space reallocation are numerous, intertwined, changing, subjective and not always directly linked to the urban or mobility plan per se;

- There is a wide spectrum of actors involved in street space reallocation contestation, of relationship between how these contesting groups interact with public authorities.

- The role of economic groups, experts and local authorities needs to be integrated into the analytical framework.

First, it shows that their motivations are numerous, intertwined, changing, subjective and not always directly linked to the urban or mobility plan per se. The main motivations identified were related to the protection of the environment, fears of gentrification, the “right to the city”, social well-being and equality concerns, the economic value or the cost of the plan and finally the lack of public consultation.

Secondly, it confirms **the transversal nature of road space allocation as an issue of contestation and public policy-making**. As such, it cuts across a number of policy domains and social interests, with a large array of actors that are likely to engage in challenging existing arrangements and contesting new proposals.

Thirdly, it emphasised that there is a wide spectrum of actors involved in street space reallocation contestations, the main ones being citizens, associations, NGOs, advocacy groups and the state.

Fourthly, **the tactics and strategies to contest were highlighted**. It showed that contesting actors use mainly events geared towards the public, communication and media strategies, elaborate discussions with public bodies and authorities, build tactical alliances with unexpected actors and use legal tools to defend their interest.

Lastly, the last section showed **how these contesting groups interact with public authorities** by either exerting influence on them by influencing the urban or mobility schemes’ design and implementation plan or by increasing their accountability and participation in the project. In other cases, they had more collaborative relations with public authorities or were simply excluded from the urban and mobility plans altogether. A final point was developed to show how the specific interactions between outside actors and elected officials are essential, as the latter tend to be the most influential or have the most influence on these contestations.

3 Conceptual framework, research design and methodology

Drawing on lessons from the literature review, a conceptual framework is developed to support comparative analysis and contribute on existing academic literature on the politics of street space. The analysis developed in this report is based upon original research conducted in the five MORE cities.

3.1 What is street space contestation?

In doing so, it highlights the various repertoires (i.e., lobbying, protest, media, etc.) used in order to make such claims and demands visible onto the agenda and to influence decision-making about road space re-allocation. It also seeks to understand how, in a context of the EU multi-level governance, these interest groups strategically combine multiple venues in order to achieve their respective goals.

Taking stock from the work done on socio-technical controversies (Callon et al., 2009) and the politics of knowledge (McArthur, 2018), this report purposefully uses the notion of street space contestation in order to examine conflicts and resistances, as well as the stakeholders' management procedures introduced by local authorities in order to accommodate these demands. In doing so, it contributes to the understanding of evolving forms of participation in decision-making and planning on road-space allocation.

Definitions

- Street space contestation is understood as the process by which divergent views on the allocation of road space are made material (Callon et al., 2009).

- Politics of expertise – how are expertise and expert positionalities used to justify positions (McArthur, 2018).

Four important considerations for contestation have been considered in this specific context.

First, due to the nature of road space allocation, a variety of actors of interests, with different levels of power and expertise, make claims on street space for a range of activities and uses. Following the work done by Lowi (1964; 1972), we assume that **the nature of the problem, rather than the context in which it is being addressed, determines levels of contestation** over the allocation of a given public resource – in this case, road space – as well as policy dynamics.

Second, the technical nature of transport policy and planning means that contestation takes place about, and through, expertise. In the context of road space allocation, the politics of knowledge is central to understand the experiences across different cities, because the accepted wisdom for urban transport planning has developed significantly across recent

decades, and different cities have different interpretations of, and utilisation of, newer approaches to transport planning. Given the importance of expertise in justifying transport interventions, contestation often draws on, or seeks to discredit, specific forms of expert.

Third, since streets are physically embedded within the built environment, and in broader processes of urban property development and expansion, **contestation does not always relate solely to the transport function of the street**. Movements based around new approaches (rather than specific project or interventions) have a distinct approach to contestation, seeking to reshape design practices and technical approaches, and leveraging new media to disseminate knowledge and build communities around it.

Fourth, as for any other type of socio-technical controversy, the time dimension is critical to street space contestation. It can be understood as sequences of debate and confrontation between a variety of actors and approaches to the allocation of road space. As such contestation constitutes an opportunity to explore the challenges it poses, to examine possible courses of action and to prioritize between the diversity of dimensions this policy issue entails. Levels of contention and the ability for closure, whether political or technical, depend on the authors of the claim, their tactics and strategies, and their ability to forge alliances.

3.2 Research design

In terms of research design, the report draws on an original dataset about why and how road space allocation has emerged as a major public policy issue both across the five cities and at EU level. It examines the ways through which these claims are made material as well as the various ways through which they are accommodated in the policy making process. More precisely, the aim has been to identify, in each city, who are the main street space contesters, what are their motivations, how their claims are made material, and the extent to which these demands are being included in policy-making processes[9].

The main objective is to understand the sociopolitical dimensions of road space allocation, and to identify main actors and how they contribute to decision-making and implementation.

3.2.1 Similarities and differences

This study does not develop a comparative analysis of street space contestation in the five MORE cities. Rather, it seeks to acknowledge both some similarities between cities as well as some major differences in the various ways contestation is made material (claims and mobilizations), the extent to which it is (or not) channelled, by formal decision-making and policy processes, and whether or not it shapes current strategies for re-allocating road

[9] This report is complementary to Deliverable 1.2, led by TUD. This report includes an up-to-date analysis of processes for management, design and construction; as well as processes for developing guides (who initiates, validates, what status that is, more or less binding etc.). It is also complementary to Deliverable 2.2, led by Buchanan computing, which includes all aspects related to regulatory issues, including enforcement.

space. The analysis done at city level has been completed with a similar work on debates currently taking place at EU level in the context of the access rights directive.

This data fed into a series of city portraits and in-depth studies about specific pieces of EU regulation (see appendices) that provide the background analysis for the cross-city findings presented in this report.

3.2.2 Data collection and analysis

Data collection is firmly grounded in the work done during the first stage of the research. It mainly draws on qualitative methods. Interviews were conducted with a broad range of actors – civil society, community groups, commercial interests, governance actors, etc. – who contest existing policies and governance arrangements about road-space reallocation. Mapping exercises were also introduced during group interviews to stimulate discussion and generate data on the barriers to coordination. In some cities, this was completed by a press review and additional background research.

Data management and ethics

The data collected in this part of the study will remain anonymous. Workshops were held under the Chatham House rule and participants to workshops and interviews were promised confidentiality. Discussions were audio-recorded for the purpose of data analysis only and Sciences Po will be the sole guardian of the recording. This will be kept securely, as will any transcripts taken or any additional material provided by interviewees. In most cases, we used this material as background information and sought to find confirmation elsewhere. These procedures were mentioned to all participants and interviewees when contacting them. They were reminded of them on the day of the workshop / interview. Participants were asked to sign an informed consent form on the day of the workshop / interview [10].

Lastly, a half-a-day workshop was held in Brussels in November 2019 where we presented some preliminary findings and asked users' associations to present their perspective about street space allocation.

Data were primarily collected by the WP2 team at Sciences Po and UCL with the help of partners involved in Task 2.3 (see Table 1a below).

[10] See the requirements specified in Section 5.1 (Ethics) of the MORE project's Consortium agreement and Data Management Plan.

Table 1a: Data collection and analysis: overview of partners' and contributors' role

Partners involved	Data collection: main contact workshops/ Interviews	Data analysis
Sciences Po	Charlotte Halpern, Juliette Thijs, Emma Dierse, Rosalie Ray, Francesco Sarti	Charlotte Halpern, Juliette Thijs, Francesco Sarti
UCL	Jenny McArthur, Peter Jones	Jenny McArthur
Constanta	George Lupascu	
BKK	Tamás Halmos, Andor Háznagy	
TfL	Tom Becker, Roisin Naughton	
CML	José Pinheiro	
Malmö	Maria Brodde Makri	
EIP	Lucia Cristea, Doina Dumitrescu	

3.3 Data collection at city level

Drawing on the work done during the first part of this study, a second series of half-a-day workshops, mapping exercises and interviews (telephone, face-to-face, group)[11] were organized in each MORE city with non-governmental organizations representing a large range of interests and views on road space allocation. Interview participants belonged mainly to the following types of organizations:

- Business and professional associations
- Private developers, utilities' companies
- Users' groups
- NGOs and civil society organizations
- Academics, experts or journalists

In the case of interviews, questions are somewhat structured, and a small number of purposive questions were asked in order to guide the general debate and avoid overly general and trivial discussions. A generic version of interview questions and guidelines for the mapping exercise is provided below (section 3.3.2). In some cities, workshops were replaced and/or completed with face-to-face or phone interviews[12]. Table 1b provides an overview of data collection during the second phase of this study.

[11] We used a similar approach and methodology than during the first part of the study. See D2.1 report, Section 3 (Halpern and McArthur, 2019).
[12] A list of interviews is provided in the reference section of each city portrait, see annexes.

Table 1b: WP2 city workshops: overview

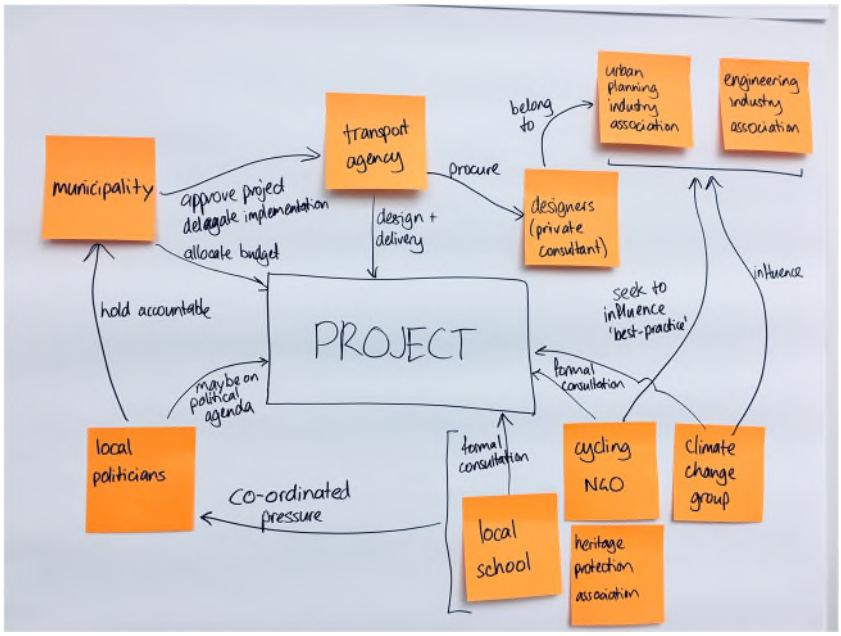
	Workshop 2	Interviews (face-to-face and telephone)	Organizers	Facilitation	MORE partners participating
Budapest	07/05/2019 (T2.3, controversies mapping, 2 groups)	October 2019	C. Halpern, A. Háznagy	C. Halpern, J. McArthur	ScPo, UCL, BKK, TUD
Constanta		October 2019	C. Halpern, G. Lupascu, D. Dimitrescu	C. Halpern, J. McArthur, L. Cristea	ScPo, UCL, EIP, Constanta Municipality
Greater London	09/05/2019 (T2.3, controversies mapping, 2 groups)	June 2019	C. Halpern, J. McArthur, P. Jones, R. Naughton, T. Becker,	C. Halpern, J. McArthur	ScPo, UCL, TfL
Lisbon	14/03/2019 (T2.1, Stakeholders mapping, 1 group)		C. Halpern, S. Somsen	C. Halpern, J. McArthur	ScPo, UCL, EIP, Lisbon Municipality
Malmö	23/05/2019 (T2.1, Stakeholders mapping, 1 group)		C. Halpern, C. Resebo, M. Brodde Makri	C. Halpern, J. McArthur	ScPo, UCL, TUD, Malmö Municipality

3.3.1 Mapping exercise

In each city in which a workshop was organised, participants were asked to work in small groups for participatory mapping exercises to articulate motivations for contesting street space allocation and reflect on action repertoires, to be reflected on a paperboard (see Figure 2).

The mapping exercise focused on the nature of interactions between public authorities and those contesting street space, such as working within official consultation or participatory processes, mobilising issues through the media, local elected officials or technical experts.

Figure 2: Mapping exercise



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3.3.2 Generic interview guide

Information about the following six sets of questions were gathered:

1. What are the main demands for and challenges associated with road-space reallocation ?
   - What are these (new) demands about?
   - Why (main triggers) and how (main drivers)?

2. Who are the main actors or representatives challenging the reallocation of street space for different users or activities?
   - How are these interests organized ? Since when ?
   - And what has been driving these demands ? Do traditional groups also contribute to this debate ?

3. What tactics do different groups use in order to challenge the status quo / planned changes to street space allocation?
   - How do these new actors challenge the existing governance arrangements and power structures governing the use of street space? e.g. leveraging political networks, building coalitions.
   - How do traditional actors (e.g., unions, professional organizations, etc.) resist proposed changes ?
   - What approaches do they use ? e.g. campaigns or media, influence strategies, political lobbying, mobilizing specific technical expertise

4. Who are the main actors or representatives challenging the reallocation of street space for different users or activities?
   - How are these interests organized ?

- What are they main tactics ? Do they align with political parties ?
- Since when ? And what has been driving these demands ?
- Do traditional groups also contribute to this debate ?

5. How are such demands and challenges managed at planning and implementation stages ?
   - Do planning processes adequately recognize the (new) demands for more diverse street uses?
   - Do the appraisal processes for transport or public space investments recognize and give sufficient value to more diverse street uses?

6. What have been the outcomes of such claims and demands ?
   - Have these demands about road-space reallocation led to innovative solutions ? If yes, how?
   - Which actors or institutions promoted and adopted these solutions?
   - The role of experimentation and pilot projects

3.3.3 Data analysis

Notes from workshops and interviews for each city were organized in InViVo. Inductive coding was used to identify and codify the range of demands on road space, and the range of policy issues that road space allocation schemes relate to. These coded fragments were organised into broader categories, to represent and further characterize the main dimensions of street space contestation. Table 2 below provides further details about the coding method. It was applied to all interview transcripts in order to generate output tables, which were then used to generate thematic focus for each report sections.

City portraits include an analysis of the material gathered as part of workshops while at the same time ensuring participants' rights in terms of data protection (see above).

Table 2: Coding method

Step	Description	Output
1	Identify references to: - deliberative spaces (formal consultation or engagement, media, social media, street) - motivation for actions	Coding structure with the following columns: Actor, Actor type, Motivation for contestation, Deliberative space
2	Identify statements making knowledge claims Disaggregate into a) contestation of expertise, b) and use of expertise as justification Identify purpose of claims	Coding structure with the following columns: Actor, Actor type, Expert claims used, Use of expertise, Purpose

3.3.4 Press review and additional background research

In order to account for the latest developments taking place in each MORE city (e.g., local elections, private-hired vehicles etc.), additional background research was needed in

complement to the work done during the first part of this study. First, three pairs of students travelled to Budapest, London and Lisbon over the summer 2019[13] as part of an internship programme supported by Sciences Po and an urban planning NGO, Urbanistes du Monde. Focusing on specific dimensions of street space allocation in each of these cities, their reports provided additional insights to the analysis done as part of WP2[14].

Second, a press review was conducted by using Factiva. This global news database provides a useful tool for spanning across a selective range of newspapers. No pre-selection or a-priori stigmatization of sources has been conducted. The information retrieved from newspaper articles was categorized in chronological order with the purpose of producing a descriptive Infobox for each of the following topics: Lisbon debate on helmets for cyclists and shared mobility users; transport debates in the context of local elections in Budapest and private-shared mobility in Greater London. Their content has been complementary to the information collected through interviews and official documents and also fed into the production of city portraits.

3.3.5 A second series of City portraits

The material gathered as part of the workshops, the mapping exercises, the interviews and the press review fed into the production of city portraits[15]. This second series of portraits were developed by and under the supervision of Jenny McArthur and with the support of Sciences Po and partners in the five cities.

More details about their authors is provided in Table 3.

Table 3: City portraits' authors: overview

City portrait	Author(s)
Budapest	Jenny McArthur (UCL), with input from Francesco Sarti (Sciences Po)
Constanta	Jenny McArthur (UCL), with input from Doina Dumitrescu (EIP) and Francesco Sarti (Sciences Po)
Greater London	Jenny McArthur (UCL), with input from Francesco Sarti (Sciences Po)
Lisbon	Jenny McArthur (UCL), with input from Charlotte Halpern and Francesco Sarti (Sciences Po)
Malmö	Jenny McArthur (UCL), with input from Francesco Sarti (Sciences Po)

City portraits are meant to complement the work done as part of Task 2.1. They have been conceived as a living document that can be updated in order to include the work done at later stages of the MORE project. By contrast to the first series of city portraits that were produced

[13] The three pairs focused respectively on : inclusiveness in sustainable mobility planning in two districts located in the Lisbon metropolitan area (Griffaton, Mendes de Andrade, 2019), addressing climate change and air pollution as part of the sustainable mobility agenda in Greater London, with a focus on the Old Kent Road (Basiliades, François, 2019), and the development of cycling in Budapest (Bleuzen, Nidhoim, 2019).
[14] A second pedagogical activity is being planned with the support of several partners in the MORE project for the entire cohort of the Sciences Po Urban school Urban planning MSc programme: this group of students will travel to Constanta in May 2020 in order to further examine proposed sustainable urban mobility developments.
[15] About City portraits as a useful tool for organizing data, see D2.1 report.

during the first part of this study, this second series of city portraits mainly draws on the material gathered as part of workshops, interviews and press review, and less so on desk analysis. Moreover, these portraits fill a gap in the existing literature about transport governance and policies.

City portraits are meant as a classifying tool and as living documents.

City portraits are available in the annex section of the report, except for the London City portrait which will be made public when this report is resubmitted in August 2021. They are all structured in a similar way, which also matches the content of this report:

1. Summary findings
2. Background: key challenges and road space interventions
3. Motivations for contestation
4. Participation in decision-making processes and public deliberation
5. Conclusions
6. Interviews
7. References

Lastly, their content will be used in order to develop short summaries, together with Polis and EIP, that can feed into the consortium's dissemination strategy (WP7).

3.4 Workshop and interview with users' organizations

As part of the work done in WP2 and in complement to work done with cities, we also sought to collect information about the users' associations perspective on street space contestation. The main objective was to discuss preliminary findings with users' federation and ask about their respective views about road space allocation.

In complement to the work done with cities, what is the users' associations perspective on street space contestation?

This was done in different ways[16]. First ECF contributed to the WP2 session at the Lisbon Assembly of Partners meeting (October 2019). Second, a technical workshop was organized jointly with WP7 in Brussels in November 2019 (see Table 4). Third, a phone interview was done with a representative from the European Disability Forum (November 2019).

Discussions focused on the choice of the notion of "contestation" in order to characterize (new) demands and claims on urban road space re-allocation. Moreover, it provided a useful understanding on how users' federations and networks see the reallocation of road space as

[16] Minutes have been produced for each of these debates and fed into cross finding results (see section 4 of this report). See also Reference section.

an opportunity and work with cities in order develop their respective visions, preferred tactics, strategies and approaches.

More precisely, participants were asked to develop a presentation around the following:

- Each organization's vision and strategy about road space allocation
- Advocacy work about street uses and shaping urban road futures
- Setting the agenda related to the priority given to different street uses
- Challenges with public consultation and stakeholders' engagement

This fed into our understanding of current debate at EU level about street space contestation, which are mainly framed in terms of access, mobility and public space. While some partners have or are about to produce their own position paper on the matter, others contributed to this report[17].

Table 4: Data collection and analysis: overview of partners' and contributors' role

Partners involved	Participants	Discussing findings from :
Sciences Po	Charlotte Halpern, Francesco Sarti	MORE project, WP2 study on street space contestation
UCL	Jenny McArthur, Peter Jones	MORE project, WP2 study on street space contestation
ECF	Aleksander Buczynski, Cristina Cortejoso	See Annexes 7 & 8 to this report
IRU	Remi Lebeda, Anne Reynaud	Access rules and UVARs
Polis	Ivo Cre, Giacomo Lozzi, Francesco Ripa	Polis' Access working group
IFP	Mario Alves	The challenges posed by private-shared mobility for pedestrians
UITP	Anne Mordret, Yannick Bousse	UITP's Transport and Urban Life Committee

4 Cross-city findings

This section looks across the findings from the five cities. It builds on the work done during the first part of this study (D2.1, Halpern & MacArthur, 2019) on the institutional, organizational and political dimensions of road space allocation in order to understand the dynamic interplay between street space contestation and policy-making.

It examines the various ways through which street space contestation is made material across the five cities and how it contributes to shaping decision-making and implementation processes.

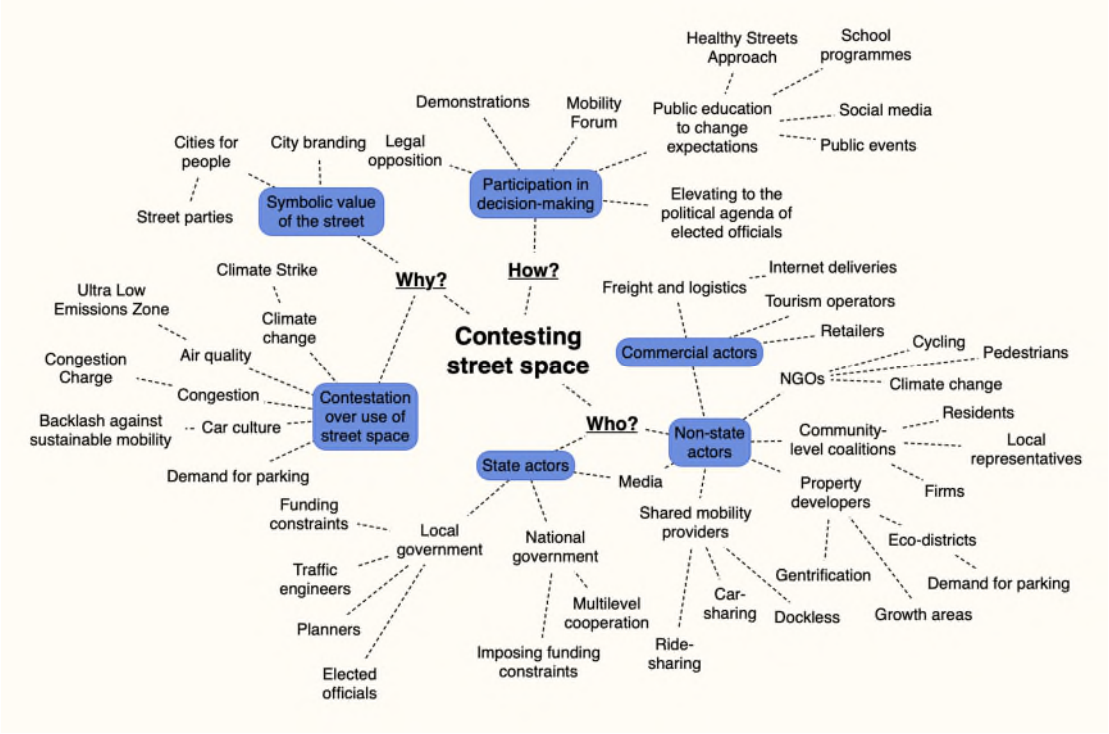
[17] See Annex section to this report, with the work produced by ECF on EU regulations and cycling.

The strong public reaction to changes in road space allocation confirms to the socio-political significance of streets, even for mundane interventions such as parking regulations, cycle lanes or changes to lane widths. As such it contributes to the existing literature on transport policy, planning and decision-making. Yet exploring the motivations and approaches for contestation also sheds light on the various ways through which street space contestation operates.

This section successively examines motivations for street space contestation in the five cities (Why), it sets out to identify contesters (Who), the tactics and strategies that are developed (How), as well as preferred venue through participation to decision making and consultation procedures (Where).

The visualisation provided below (Figure 3) gives an overview of the findings from across the five city portraits as discussed in this cross-city finding section.

Figure 3: Visualisation of street space contestation across the five MORE cities.



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4.1 Motivations for contesting street space

Findings from across the five cities show that contestation stems from two types of motivations: those in favour of new approaches to road space allocation and seeking to shift public expectations, and those against these new approaches for fear they will constrain their mobility rights or contribute to socio-spatial inequalities.

More precisely, these new approaches are justified in the name of environmental protection, the “right to the city”, social well-being, redistribution and equality, and the need to strengthen

the role of public consultation. These motivations reflect the shift towards a “city for people” approach (Gehl, 2010) that has been observed in a number of European cities and beyond[18]. In this context, motivations in favour of substantial road space reallocation seek to promote more sustainable, lively, safe, and healthy urban futures. Table 5 below summarizes key findings from the five MORE cities about motivations for contesting new approaches to road space allocation. These findings are discussed in more details in the following paragraphs.

Table 5. Motivations for street space contestation

City	Motivations for street space contestation
Budapest	Pressure to maintain low-price parking supply Youth pushing for actions to tackle climate change Car-centric planning and disconnection between municipal goal and actions
Constanta	Rise of a movement demanding space for people prioritized over road space for cars Parking place for disabled users not adequately distributed in the city and no enforcement of national legislation on accessibility Dominant car culture of the wider public limiting schemes that would reduce space for cars Stakeholders not enough consulted since decisions are taken a-priori
London	Access regulations and ULEZ expansion: prioritization, optimization and sensitive management, Private and commercial vehicles are grouped together, rather than being addressed as separate issues. Accessibility for persons with reduced mobility Air quality as matter of both health and global competitiveness
Lisbon	Car culture of the wider public affecting parking regulations Lack of flexibility of regulation undermining the development of creative solutions Urban regenerations and residential moving out from the city centre due to housing prices
Malmo	Limited actions to reduce space for cars and parking places as a result of the car culture Increasing opposition to cycling as it reduce space for cars generating congestions (never experienced before from the population of Malmo)

4.1.1 Environmental protection at large

Environmental protection, including air pollution, carbon emissions, climate change and nature in cities, constitutes a major driver for promoting new approaches in urban and transport planning[19]. In Malmö, London, Budapest and Lisbon, the Fridays for future strikes, which took place throughout 2019[20], have contributed to transforming technical debates about road space allocation into an issue of common interest.

In Budapest, younger generations have been pushing for action on climate change for several years now, with sustainable transport being one of the ways through which new forms of urban planning could be developed[21]. In the context of the 2019 local elections, new

[18] See the work done as part of the CREATE project.
[19] In the literature review section, see Sosa López and Montero (2018) and Leontidou (2006).
[20] For an overview of this global movement, see Fridays for future, 2020, Map. Retrieved from: https://www.fridaysforfuture.org/statistics/map (consulted on 29/01/2020).
[21] See Annex to this report, Budapest city portrait, p.7.

approaches to road space allocation have particularly emphasised the urgent need to respond to climate change and improve sustainability in the metropolitan area at large.

As a result of the advocacy work done by environmental organizations in Malmö, the wider public was included in the contestation, which in turn directly contributed to shaping the local political agenda[22]. In London, air quality constitutes a major motivation for promoting new approaches to road space allocation and have contributed to justifying the expansion of the Ultra Low Emission Zone[23].

4.1.2 Sociospatial justice, social well-being and equity concerns

New approaches to road space allocation as a critical mean for reclaiming the control of the public space and to push for alternative, more inclusive, urban development models.

Claims about road space re-allocation are also driven in the name of socio-spatial justice or the "right to the city" (Fainstein 1995). They are particularly strong with movements protesting against housing developments and urban regeneration programmes that prioritised car users and traffic. In this context, new approaches to road space allocation are seen as a critical mean for reclaiming the control of the public space and to push for alternative, more inclusive, urban development models. Movements promoting "the right to the city" also include demands for inclusive mobility, for accessibility and affordability of public transport services, and for redeveloping public spaces around multiple functions (e.g., playgrounds, etc.)[24].

The case of Constanta illustrates this thinking, with NGOs and stakeholders expressing a strong desire to transform the city into a place where space for people is prioritised over road space for cars[25]. These demands have contributed to shaping the municipality's agenda, with a number of interventions underway or planned to change infrastructures and regulations to reallocate road space for pedestrians, cyclists and public transport users.

Street space contestation sheds light on the unwanted effect of road space reallocation strategies in terms of socio-spatial inequalities.

Claims about road space re-allocation also contribute to highlighting the unwanted effects of road space reallocation strategies in terms of accessibility and socio-spatial inequalities. Findings from across the five cities suggests that road space reallocation strategies foster some opposition, which is motivated by fears of these measures' impacts in terms of socio-spatial inequalities. In a number of cases, these transport measures are often planned in

[22] See Annex to this report, Malmö city portrait, p.11.
[23] See the work done by Basiliades and François (op.cit.).
[24] In the literature review section, see Stehlin (2015); Stehlin and Tarr, 2017; Durnova, 2018; Dodman 2009; Legacy and Van den Nouwelant, 2015; and Verlinghieri and Venturini, 2018).
[25] See Annex to this report, Constanta city portrait, p.5.

combination with large-scale urban regeneration initiatives and housing redevelopment programmes.

As observed in Greater London, Lisbon and Budapest, contestation highlights the ambiguous nature of road space allocation the fear that existing residents will be pushed out of inner-city neighbourhood. The case of Lisbon is particularly representative of such demands in a context in which the reallocation of road space to sustainable and active transport modes in the city centre, where the number of residents continuously decreases, is being criticized for prioritising the needs of tourists and visitors[26].

Moreover, opposition to the reallocation of road space is also motivated by fears of specific sustainable transport user groups – pedestrians, cyclists, public transport users – that these measures will impact negatively their respective situations. This is particularly the case of those claims seeking to maintain public transport solutions high onto the urban agenda. In Constanta for example, such mobilisations highlight the need for investments and measures aimed at strengthening the quality, the affordability and the efficiency of sustainable transport alternatives[27].

In a similar vein, organizations representing the interests of persons with reduced mobility (PMR) in Constanta[28] have supported road space reallocation strategies insofar as they would contribute to enhancing the number and the spatial distribution of PMR parking places or to enforce existing legislations on accessibility. In Greater London, road space reallocation strategies were considered an opportunity to increase consideration beyond reduced mobility (e.g., cognitive impairment, mental health, etc.).

4.1.3 The legacy of the car culture as a major driver for resisting road space reallocation

Findings from across the five cities also suggest that the proposals that are put forward are met with some resistances from the wider car-driving public to change their mobility behaviours. The legacy of the car culture is repeatedly mentioned as a major barrier against the planning and implementation of road space re-allocation strategies aimed at promoting a shift towards sustainable transport. Examples of such opposition are documented across all the five MORE cities.

In London, recent debates about the redevelopment of Oxford street have illustrated the Westminster Borough's decision to block the proposed scheme in reaction to resistances among its constituencies[29]. In Lisbon, the municipality seeks to increase the share of sustainable transport modes in the modal split by introducing new approaches to road space allocation. In this context, the launch of a campaign by the Portugal Car Club, with the support of the national Road Safety Agency, to enforce the use of the helmet[30] somewhat

[26] See Annex to this report, Lisbon city portrait, p.4. See also the work done by Griffaton and Mendes de Andrade (op.cit.) in two districts of the Lisbon metropolitan area.
[27] See Annex to the D2.1 report, Constanta city portrait, p.15.
[28] See Annex to this report, Constanta city portrait, p.6.
[29] See Interview with LCC, Annex to this report, London City portrait.
[30] See Annex to this report, Lisbon city portrait, p.7-8.

competed the municipality's efforts. By contrast, the municipality was, to some extent, supported by micro mobility operators, such as Lime[31], and cycling associations.

In Constanta, debates about road space allocation have highlighted the role of the car culture in shaping political discourses and preferences about parking management and car restrictions[32]. Nevertheless, alternative approaches were also advocated in the context of the last local election campaign and contribute to shifting expectations of the wider public. In Budapest, debates about new approaches to road space re-allocation have been dominated by pressures in support of maintaining low parking prices. Insofar as a large share of their revenues stem from parking places, district authorities tend to oppose the adoption and/or the enforcement of alternative approaches[33].

Lastly, in Malmö, debates about new approaches to road space re-allocation have met with strong resistances from car users. In this case, cycling and pedestrianization schemes are blamed as contributing to two rising issues of concern: congestion and insufficient parking places[34].

4.1.4 Ensuring access rights in the context of road space re-allocation

Street space contestation as a specific form of opposing road space re-allocation strategies.

By contrast to claims in favour of road space reallocation strategies, empirical findings from across the five cities show that street space contestation also stems from specific groups, such as professional and business organizations (e.g., taxi drivers, the freight and logistics industry etc.), opposing those schemes. The specific situation of freight and commercial travel is particularly salient in local debates about new approaches to road space allocation. These groups' motivations are often framed in terms of access rights, as opposed to road space allocation, and seek to find a more favourable balance between socioeconomic interests and the city's efforts to mitigate the effects of climate change. In this context, this industry and its members often opts for a multiple venue-shopping strategy[35], in which its interests are also represented at the national and the European levels as part of decision-making processes about access rights regulations.

More generally, this motivation for street space contestation highlight the challenges posed by integrated sustainable mobility planning and the need to better integrating logistic planning into municipal sustainable strategies. Findings from the five MORE cities shows that stakeholders often recognize that this industry should be better integrated into local strategies. Also, consultation procedures are often more developed at other levels of

[31] On this occasion, Lime organized a counter-demonstration and distributed free helmets on the streets. See Annex to this report, Lisbon city portrait, op.cit.
[32] See Annex to this report, Constanta city portrait, p.7-8.
[33] See Annex to this report, Budapest city portrait, p.6.
[34] See Annex to this report, Malmö city portrait, p.6-7.
[35] This is often referred to in the literature about vertical policy-making as venue shopping (Guiraudon, 2000).

government, which may account for this industry's overall tendency to favour European- or country-wide policy venues as opposed to city- or district / borough-specific solutions. In this context, motivations for resisting road space re-allocation are often justified in relationship with the absence of a differentiated set of consultation procedures at the local level that would prevent this industry's interests to be grouped together with private car travel.

Beyond the specific case of freight and commercial travel activities, findings highlight the need to better take into account the role and the variety of private actors engaged in street space contestation in future research.

4.1.5 Ambivalent views about micro mobility

Findings also shed light on ambivalent views regarding the role of micro mobility modes in the context of road space reallocation strategies[36].

What should be the role of micro-shared mobility in the context of the urban sustainable transport agenda?

In a number of European cities, the services provided by these new entrants, often stemming from the private sector and developing a wide range of mobility services such as e-scooters and e-bikes, are considered a major driver in promoting alternatives to car use. In this perspective, addressing the challenges posed on the ground by the development of micro mobility contributes to justifying large scale road space reallocation strategies. More precisely, these rapidly evolving mobility services are addressed as complementary to public transportation, due to their ability to provide a "last mile solution"[37].

In Budapest, the redevelopment of embankment on the Buda side of the Danube as part of the Cities-4-People project led to establishing "mobility points". They aim at encouraging the use of sustainable transportation modes and include new micro mobility services[38]. Following the claims made by the newly elected mayor during the local election campaign[39], micro shared mobility is expected to play a growing role in the development of a city-wide integrated sustainable transport strategy.

In line with the arguments made by cities' networks and users' federations in Europe and beyond[40], the development of micro mobility services offers some opportunities for urban and metropolitan authorities to establish new and strengthen existing forms of mobility governance and with the explicit aim at shaping its uses as well as its expansion. In this context, claims linking micro mobility with efforts at strengthening capacities for accessing and analysing data is considered a major driver for overcoming what had been highlighted as

[36] For a cities' perspective on these debates at EU level, see the position paper recently published by Polis (2019). See also Minutes from the Joint WP2 & 7 MORE technical workshop in Brussels.
[37] See also contributions by Polis and IFP at the Joint WP2 & 7 MORE technical workshop in Brussels.
[38] See Annex to this report, Budapest city portrait.
[39] Ibid, p.13. See also the manifesto "Vegyük vissza Budapestet!"
[40] See recent position papers published by ITDP (2019), the OECD ITF Forum (2020), Polis (op.cit.) and both IFP's and UITP's contributions to the Joint WP2 & 7 MORE technical workshop in Brussels.

a barrier to developing new approaches to road space allocation during the first part of our research[41].

This approach is particularly developed in Lisbon in relationship with tourist-led demand for mobility in the city centre. It has also contributed to strengthening the role of urban governance in regulating mobility services by fostering the development of new policy resources (e.g., data analytics, authority) and capacities during implementation[42].

By contrast, other cities in Europe have adopted a more restrictive approach to micro mobility, in order to regulate its negative externalities in terms of safety, socio-spatial inequalities and environmental impact. This is particularly the case of urban authorities characterized by strong capabilities in their ability to govern transport and mobility developments or in which current political majorities are dominated by left wing political parties. In this context, motivations are made in the name of the public interest, as observed in London and Malmö in the MORE project, or Paris[43] and Barcelona[44] for example.

In the case of Malmö, public micro mobility solutions are being preferred as part of the new eco district of Nyhamnen[45]. In the case of London, the regulation of private hired platforms led to a series of negotiations and disagreements, also shaped by successive legal actions and the mobilization of a large number of stakeholders, including public authorities (TfL, London Assembly, Mayor's office), professional organizations (e.g., London Taxi Drivers associations) as well as members of the political opposition[46].

4.1.6 Lessons learnt

Findings about street space contestation confirm the work done during the first part of this study, namely that road space allocation is a crosscutting issue[47]. Not only is it transversal to a number of policy domains, such as urban regeneration, transport and infrastructure planning, environmental protection and air quality, and economic development, but it is also spread out across a large number of potentially interested stakeholders. This has a number of practical consequences, as observed in the first part of the research with organizational and institutional dimensions, but for street space contestation as well. It also confirms the idea according to which the nature of the issue constitutes a strong determinant for contestation dynamics (Who's, How's, Where).

4.2 Street space contesters: containers and expanders

Findings about motivations for contesting street space both reflect and account for the variety and the volatility of interests and actors across levels of government that are potentially concerned with measures aimed at reallocating road space (see overview in Table 6 below).

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[41] See D2.1 report, Halpern and McArthur, 2019, Section 5.
[42] See Annex to the D2.1 report and to this report, Lisbon city portraits.
[43] See study produced by 6-t team about micro mobility users in Paris.
[44] See forthcoming report by Artigas and Castellano (2020) on the regulation of private mobility shared operators in Madrid and Barcelona.
[45] See Annex to this report, Malmö city portrait, p.5-6.
[46] See Annex to this report, London city portrait, p.16.
[47] See D2.1 report, op.cit.

To what extent do results from the MORE project confirm findings from the literature on policy problems? In so far as road space allocation issues have a dynamic quality, they are expected to reflect a continued struggle between supporters of new approaches and detractors. As a result, “containers” and “expanders” are expected to vary over time and according to the specific type of measure under consideration (Rochefort and Cobb, 1994)[48].

In the case of MORE cities, who are those actors? To what extent do they contest street space allocation and seek to influence proposed changes? What are they main interests and what tools do they use in order to promote them?

Table 6: Selective overview of street space contesters – both containers and expanders

	Selective overview of street space contesters – both containers and expanders
Budapest	- Younger generations as part of the movement Fridays for Future Political Parties (Dialogue) NGOs (Extinctive Rebellion)
Constanta	- Local organization pushing for a “city for people, and not for cars” approach - commercial actors, business groups
Lisbon	- Younger generations as part of the movement Fridays for Future - Automobile Club Association advocating for the mandatory use of a helmet for both cyclists and micro mobility users - Municipal police as well as the National Safety Agency supported the Car Club Association’s campaign - Real estate developers contest urban planning regulations
London	- Younger generations as part of the movement Fridays for Future - LTDA with demands for increased restrictions on private shared mobility services - Extinctive Rebellion, favouring more disruptive and radical approaches to car use restriction - Commercial stakeholders’ contestation of the ULEZ
Malmö	- Younger generations as part of the movement Fridays for Future - Private shop owners and commercial actors

4.2.1 Citizens as street space contesters

As far as citizens are concerned, empirical findings from across the five MORE cities confirm the role of street space contestation as a driver for large scale climate change campaigns and movements (Iveson 2013). This is particularly the case among younger generations as part of the movement Fridays for Future, but it also fosters the development of new political movements opposing existing political majorities. In the case of Budapest for example, the Critical mass movement has been instrumental in the mid 2000s in bringing together thousands of citizens in order to claim increased attention to cylcists[49]. Over the recent years, Fridays for Future also contributed to mobilization support among younger generations in favour of the re-allocation of road space. Even though these movements only represents a

[48] This point was already developed in the literature review for D2.1 report (Halpern and McArthur, section 2).
[49] This movement was born in San Francisco in 2004 and inspired a similar mobilization in Budapest. In 2008, it reached its peak with 80.000 people participating to this annual demonstration (Bleuzen and Nidhoim, 2019).

small dimension of a larger political agenda, it contributes to shifting the public's expectations about transport and mobility, and to strengthen its support in favour of alternative policy approaches. Similarly, local mobilizations against state- or commercial-led urban development and infrastructure projects have contributed[50], to the strengthening of a place-making approach to transport and mobility at the local level either within the ruling administration or among its opponents.

4.2.2 NGOs as street space contesters

Empirical findings also confirm the role of pre-established organizations in selecting road space allocation as a critical issue to be advocated as part of their influence strategies – both formal and informal. In some cases, this approach was favoured by one organization alone (Stehlin, 2015). This was observed in Lisbon, with the campaign organized by the Automobile Club Association in advocating the mandatory use of a helmet for both cyclists and micro mobility users. In Constanta, a local organization has been pushing for a "city for people, and not for cars" approach, and in the case of London, the London Taxi Drivers Association (LTDA) has been pushing for increased restrictions on private shared mobility services[51].

Yet street space contestation also contributes to shape relationships between civil society organizations in terms of increased competition or cooperation[52]. This has been observed in both London and Budapest. In London for example, with a number of organizations sharing similar goals in their respective demands for more stringent measures against climate change and air pollution[53]. By contrast, such claims have also contributed to internal splits within the local environmental movement and to the emergence of new organizations such as Extinctive Rebellion, an international network of climate change campaigners, who favour more disruptive and radical approaches to car use restriction.

Lastly, findings suggest that street space contestation may also contribute to joining or actively contributing to the work done by umbrella organizations[54], such as the European Disability Forum (EDF), the European Cyclists Federation (ECF), or the International Federation for Pedestrians (IFP), in representing the interests of (sub)national organizations at European or national level and pushing for a multi-dimensional approach to mobility[55].

4.2.3 Governmental and public authorities as street space contesters

Findings from across the five MORE cities also confirm that governmental and public authorities can also act as street space contesters. This is particularly relevant in the context

[50] State funded stadiums and the Liget project. This confirms the work of Hubbard and Lees (2018); Lubitow et al. (2016) and Legacy et al. (2017).
[51] See Annex to this report, London city portrait, p.15.
[52] See the Literature review section, and the work by Aldred (2016); Sheller (2015); and McArthur (2016).
[53] See Basiliades and François (2019) and the Annex to this report, London city portrait, p.13.
[54] See the Literature review section, and the work done by Uysal (2012); Durnova (2018); Connolly (2019); Dodman (2009); Legacy and Van den Nouwelant (2015); Legacy (2016); Díaz Orueta (2007); Verlinghieri and Venturini (2018); Van den Ende and Van Marrewijk, (2019); Sosa López (2017).
[55] See contributions from ECF and IFP to the Joint WP2 & 7 technical workshop in Brussels, as well as the interview with EDF.

of strong levels of competition between political parties, levels of government and public organizations. Political parties and politicians seeking to differentiate themselves on a highly competitive market play a prominent role in initiating a campaign in support of new approaches to road space allocation.

Moreover, they may also seek to exploit the political momentum resulting from a pre-existing mobilization campaign. The politicization of road space allocation and claims for issue ownership among political parties was observed across the five cities. Cases of institutional and organizational competition are particularly exacerbated in the case of capital cities in the MORE project that is, London, Budapest and Lisbon[56]. In the case of Lisbon for example, the development of a new alliance between car users' representatives (Automobile Club Association) and the National Safety Agency in support of a more restrictive approach to cycling and micro mobility partly resulted from a critique against the city's legitimacy to intervene in debates about road space allocation. In Budapest as well, the ecological party Dialogue strongly advocated against state-led interventionism in the field of urban development and infrastructure planning during the last election campaign[57].

4.2.4 Business and commercial actors

By contrast to findings from the literature review, private stakeholders play a critical role in shaping road space reallocation strategies across the five MORE cities. In addition to specific groups, such as professional and business organizations (e.g., taxi drivers, the freight and logistics industry etc.) or private mobility operators, two other categories of private actors were identified. First shop owners and retailers regularly challenge those schemes aimed at restricting car access in the city centre, such as pedestrianization initiatives[58]. Second, real estate developers play a critical role in opposing new approaches to road space allocation. This is the case in Lisbon and Malmö for example, where debates about parking and new urban developments have been instrumental in order to oppose more stringent regulations.

This confirms the need, when developing new approaches to road space allocation, to consider its multi-functional role as part of wider urban ecosystem[59]. Interestingly, findings from the MORE project suggest that chambers of trade and commerce play a very limited role in channelling the interests of business and commercial actors as opposed to users' and professional associations. This approach contributes to strengthening levels of competition between interest groups while at the same time, encouraging local authorities in establishing multiple interest-based consultation procedures in order to facilitate the micro-management of street space contestation. This in turn weakens the ability for joint collective action, either between business and commercial actors, and with local authorities as part of city-wide strategic planning.

[56] A result which is consistent with those from the CREATE project (Halpern 2018).
[57] See the main priorities in its candidate's political manifesto, as discussed in Annex to this report, Budapest city portrait, op.cit.
[58] This is consistent with findings from the CREATE project in Vienna, Copenhagen and London (Halpern 2018).
[59] See Jones et al., 2020 (forthcoming).

4.2.5 Lessons learnt

Findings from the literature review about the various categories of actors that are likely to engage in street space contestation are confirmed to some extent only. At least three categories of stakeholders need to be reintegrated in order to account for the politics of road space allocation across the five MORE cities, namely local authorities, business actors and experts. Moreover, and although characterized by their diversity, we expect to find some similarities in the various ways through which these interest groups and public authorities chose to mobilize their constituencies, promote their interests and seek to influence decision-making.

4.3 Tactics and strategies for contestation

Empirical findings confirm that a wide range of tactics and strategies are used in order to contest existing road space allocation arrangements and promote new approaches. This section examines more specifically the use of communication – old and new forms – to mobilize the wider public to participate. It is complementary to the focus on actors and sheds light on the critical role of framing and narratives in building support for or against a given measure. As part of communication campaigns, volunteering activities, networking and mediatisation are used in order to diffuse and organise information about proposed schemes.

Has social media displaced traditional ways of demanding change, through demonstrations or protest?

4.3.1 Shaping the public debate through mass mobilizations

Strategies aimed at shaping the public debate and awareness raising among the wider public rarely aim at advocating specific road space allocation. By contrast, they are often framed as part of an overarching goal – climate change, sustainable city planning, etc. – in which new approaches in transport are considered a mean but not an end.

Climate change mobilizations are a key driver in all cities[60], however they have not gone beyond building public support to advocating for specific road space allocation solutions. In Budapest for example, climate change fuelled into large scale mobilizations and marches sought to build support for a transversal sustainability agenda[61]. Yet in a context in which outsiders could hardly influence decision-making and implementation[62], their impact on the urban transport agenda remained limited until this grassroots movement turned into a political force capable of winning the local elections. The results achieved by the ecological party Dialogue and its candidate, Gergely Karacsony, at the local elections in the Fall 2019 are likely to foster a more sustainable approach to transport and mobility, including road space reallocation initiatives.

[60] This confirm findings from the literature review (Stehlin and Tarr, 2017; Uysal, 2012)

[61] See Annex to this report, Budapest city portrait, p.6. See also the work by Bleuzen and Nidhoim (2019).

[62] See Annex to the D2.1 report, Budapest city portrait, section 5.3.3.

Similarly, the Fridays for Future movement has not been able so far to go beyond raising the public's awareness about climate change in order to accelerate the adoption of a more ambitious road space allocation strategy. This is mainly explained by the disconnect between a framing focused on youth and future generations on the one hand, and specific road space allocation solutions that are mainly addressed in a technical way and constitutes a source of constraints for other social groups[63].

4.3.2 Framing street space contestation as a solution to urban liveability

In some places, new alliances based around place-making and the symbolic use of public space are also emerging. In this perspective, road space re-allocation is conceived as a solution to amenity and cultural/commercial development, instead of driven by users of a single mode.

In London and Constanta, this new approach to urban planning is driven by public authorities. In Constanta, pedestrianization in the city centre aims at supporting leisure activities and increased liveability for a diversity of city users[64]. Promoting sustainable transport measures aimed at prioritising public transport, walking and cycling on main boulevards is also conceived as an opportunity to develop strategic alliances with non-governmental groups, such as business organizations and grassroots movements. In the outer boroughs of Greater London, where car use remains dominant, the implementation of measures aimed at substituting private cars with walking and measures followed a slower pace than in the rest of the metropolitan area[65]. In a context in which boroughs retain ownership and control over 95% of the city's roads and streets, the politics of road space allocation are primarily shaped by institutional competition between the choices made at metropolitan level and the resources mobilized by borough councils[66].

By contrast to those cases in which road space re-allocation is driven by public authorities and shaped by institutional competition, Budapest is an interesting case of people-led measures against state- and private-led development. The city's unsuccessful bid for the 2024 Olympic games or the Liget project have met with a strong opposition from grassroots movements due to their environmental impact. More generally, they also resulted from increased institutional competition between national and municipal authorities in setting priorities for urban futures in the Hungarian capital city. The disconnect of such schemes with the vision and the priorities of the mobility Plan was also emphasised during the 2019 local elections campaign[67].

4.3.3 Street space contestation as part of city-branding strategies

In complement to the above, road space reallocation measures are also central to strategies aimed at branding cities as sustainable and globally competitive[68]. These findings are consistent with the work done by Eshuis and Klijn (2012), and highlight the critical role of city

[63] See Annex to this report, Malmö city portrait, p.11.
[64] See Annex to the D2.1 report, Constanta city portrait, p.17.
[65] See Annex to this report, London city portrait, p.6.
[66] See Annex to the D2.1 report, London city portrait, p.10.
[67] See Annex to the D2.1 report, Budapest city portrait p.10.
[68] In the literature review, see the reference to the work done by Eshuis and Kljin (2012).

branding in reducing levels of street space contestation in three ways at least: reframing road space allocation into a mean towards a wider goal, creating a sense of loyalty and support among a large variety of stakeholders, and enabling the development of a straightforward communication strategy towards the media and the wider public. Malmö and Lisbon offer good examples of an approach that proved particularly effective in co-opting street space contesters in the name of a long-term goal.

In the case of Lisbon, the development of a shared vision and political project under the leadership of Mayor Fernando Medina aimed at transforming Lisbon in a "global sustainable city" has been critical in order to raise awareness among the wider public, build support among a large share of non-governmental organizations and reshuffle policy priorities across a large number of policy sectors, including transport[69]. More precisely, this overarching goal in both legitimizes and gives coherence to foreign investments seeking to redevelop prominent locations in the city centre, as well as to infrastructure developments seeking to increase the city's attractiveness for tourists and visitors. In this perspective, debates about road space re-allocation highlight their instrumental role as a mean only.

Similarly, road space re-allocation in Malmö serves an overarching place-making goal in the context of increased competition with other northern European cities, such as Copenhagen and Rotterdam. By proposing the development of a new eco-district, municipal authorities confirm the pursuit of a long-term urban development strategy that was launched in the early 1990s with the planning of a first eco-district in the former port area and led to the city receiving the 2010 World Habitat Award, as well as several European and national awards for its long-term efforts for sustainable urban planning (Nyland 2014). In this perspective, road space allocation measures are part of a wider sustainable agenda aimed at strengthening the city's attractiveness for residents and investors (both foreign and national). There again, this overarching goal contributes to reshuffling policy priorities across policy domains and to legitimizing measures aimed at reducing car use in the city centre[70].

More generally, findings from Lisbon and Malmö suggest that road space re-allocation strategies are less a driver than an output of city branding strategies. In this perspective, the search for efficiency and optimality, which is often put forward in order to support such measures in transport, matter less than the ability to demonstrate their contribution to reaching an overarching, long-term political goal. The role of political leadership is critical in this context.

4.3.4 Building support through traditional medias and digital networks

The work done across the five MORE cities also highlight some strategies aimed at advocating specific road space allocation measures about safety, the negative externalities of car use, and climate change.

[69] See the mayor's discourse at the Web Summit in early November 2019, during which a variety of new sustainable measures were announced in the context of "Lisbon (wanting) to be the European green capital" (EcoNews, 04/11/2019).
[70] See also the critical view in the urban research literature regarding the long-term effects of this city-branding strategy: some authors have argued good city branding does not necessarily lead to effective policy change (Anderberg and Clark, 2009), while others emphasized the growing role of private stakeholders and neoliberal policies as a result of this turn (Baeten, 2012).

Educating children through the use of volunteering activities remains a widely used strategy in both Constanta[71] and London[72] for those organizations advocating new approaches to road space allocation. In addition to building awareness to safety issues and the negative externalities of car use, these volunteering activities also contribute to raising awareness among parents and school administrations.

In this context, traditional medias and digital networks are increasingly used by all types of stakeholders[73]. A large share of the public debate about specific road space re-allocation measures now takes place via digital networks and social media (e.g., YouTube, Twitter, Facebook, etc.). The internet is increasingly used by both governmental and non-governmental organizations in order to network, build support, raise awareness (e.g., online petitions and polls) and publish content. More precisely, digital networks, social media and traditional media are not only used to produce unconventional decentralised expertise but they also contribute to establish new narratives (McArthur 2016).

Social media is now considered another – but not the only – tool for advocacy and mobilising ideas

In London, findings suggest that social media is now considered another – but not the only – tool for advocacy and mobilising ideas. It has now become widely used across all types of stakeholders in order to both spread information and engaging with public authorities and/or NGOs. Yet it remains used in combination with other action repertoires and tools, such as lobbying, politicization and legal action[74] and as any other contestation tool, it requires the strengthening of these organizations' communications teams and strategies.

In Lisbon, communication and social media are instrumental not just for mobilising support within the municipal administration but also for pushing the public debate on alternative approaches to mobility. The rapid development of such policy tools has been instrumental in sharing data, communicating results and building support in favour of sustainable transport measures. This led a large number of stakeholders – politicians, NGOs, business groups, etc. – to invest more resources in social media networks and the local press in order to push their interests forward – for or against road space re-allocation measures – and shape the political agenda[75].

Public authorities that is, transport authorities or city administrations, seeking to introduce stringent measures against car use and to actively support the re-allocation of road space often find themselves in want of their public. The circulation of best practices across EU cities, which is actively promoted by a variety of stakeholders – EU institutions, cities' networks, users' organisations, think tanks etc. – constitutes another good example of the disconnect between policy solutions on the one hand, such as road space re-allocation

[71] See Annex to this report, Constanta city portrait, p.8.
[72] See minutes from the 2nd London WP2 workshop, May 9, 2019.
[73] This confirms findings from the literature review, in particular Trapenberg and Frick (2016); Aldred (2016); Connolly (2019).
[74] See minutes from the 2nd London WP2 workshop, May 9, 2019.
[75] See Annex to this report, Lisbon city portrait, p.14.

measures, and policy problems on the other hand as framed according to local dynamics pertaining to each urban context. The recent enthusiasm for the regulation of kerbsides may on the one hand contribute to expanding the taxonomy of tools available for cities to categorize and regulate activities[76], but on the other hand, when considering the concrete strategies adopted at an operational level, policy solutions are shaped by existing regulatory regimes[77]. The diffusion of the Healthy streets approach from London to Budapest highlights the need for local transport authorities – in this case BKK – to raise awareness and shape local demand through education and deliberative processes[78]. Yet the use of social media was also favoured by street space contesters in order to advocate change in urban and transport planning. Grassroots movements invested massively in knowledge and information-based resources (e.g., IT specialists, building websites and forums, strengthening online communities, etc.)[79].

On a different note, findings from across all five cities in the MORE project also suggest the unwanted effects of overestimating the role of digital networks and social media as opposed to other type of action repertoires. A large number of interviewees admitted the risks of being overly dependent on a form of "click activism" as opposed to classic forms of contestation such as protest, lobbying and organizational capacity-building. Moreover, social media and digital networks may be instrumental in the rapid and massive diffusion of information, yet their effect on other forms of socio-political forms of participation is not a straightforward one.

4.3.5 Lessons learnt

Street space contestation takes different forms

Contesting street space takes different forms, and all types of stakeholders have now increased and adapted their communication strategies and resources in order to promote their vision of transport and urban futures. This functionalist approach to the selection of tools and contestation modes should not, however, lead to underestimate the role of contestation cultures and action repertoires over time. Yet these tools are rarely used in isolation from more traditional forms of action repertoires, including participating to decision-making and public deliberation. Together, they account for the emergence of action repertoires that reflect varying degrees in the intensity of the dispute.

4.4 Participating to decision-making and public deliberation.

In this section, we focus successively on discussions with public bodies, local authorities and the government, tactical alliances and elections. Findings from across the five MORE cities confirm the various ways through which street space contesters engage in decision-making and public deliberation.

[76] See for example studies published by ARUP (2018), NLA (2019) and the OECD ITF Forum (2019).
[77] See findings from D2.2. report (Morgan, 2020).
[78] See Annex to the D2.1 report, Budapest city portrait p.11.
[79] See Annex to this report, Budapest city portrait, p.12.

Unlike those studies highlighting the critical role of cultural and historical factors in accounting for participatory practices (Durnova, 2018), findings suggest that participation cultures can be renewed over time as a result of evolving relationships between public authorities and non-governmental organizations. First, this helps characterizing a variety of influence-seeking strategies ranging from all the way to participating to formal consultation and stakeholders' engagement procedures. Second, and following the classic work done by Tilly and Tarrow (2016) on contentious societies, the selection of contestation tools and strategies also that have long term consequences of their own on future mobilizations and contestation cultures in a given organization or territory.

The ability to develop participatory spaces shapes evolving relationships between public authorities and non-governmental organizations.

Table 7 develops an overview of preferred modes of participation to decision-making and public deliberation across the five MORE cities.

Table 7: Modes of participation to decision-making and public deliberation

Modes of Participation	Budapest	Constanta	London	Lisbon	Malmö
Events and mobilizations	v		v	v	v
Media & Social network	v	v	v	v	v
Institutionalized relations with authorities			v	v	v
Strategic Alliances	v		v	v	

4.4.1 Establishing institutionalized relations with public authorities

Findings suggest that street space contestation constitutes an opportunity for promoters of road space re-allocation to develop formalized space for dialogue between a variety of stakeholders[80]. In Lisbon and in London, such spaces have contributed over time to establishing a dense network of relationships enabling the involvement of business organizations, NGOs and a wide range of stakeholders in policy making. As a result, informal venues of participation, such as street contestation, play a lesser role than formal venues of participation, when it comes to discussions about specific road space allocation measures[81].

In Lisbon more specifically, the formal adoption of a Memorandum of Understanding between the municipality and micro mobility operators is considered an instrumental tool for shaping relationships between these two stakeholders. Whether considered the result of a strategic alliance or a driver for institutionalized lobbying, these monthly and thematic meetings are now the envy of all other stakeholders – cyclists, pedestrians, persons with reduced mobility, etc[82].

[80] In the literature review, see the work by Wolf and Van Dooren (2017); Díaz Orueta (2007), Verlinghieri and Venturini (2018); and Sosa López and Montero (2018).
[81] See Annex to this report, London city report p.11.
[82] Regarding the tool itself, see Annex, Lisbon city report p.11-12. For critical views, see also Griffaton and Andrade de Mendes (2019).

In all five MORE cities, the growing role of cities in shaping urban mobility futures highlights the need to open new participation venues for interest groups that used to be primarily organized at state or at European level as part of their policy work. This has been the case in London, where institutionalized relationships have been established with the freight and logistics industry as part of the development of more detailed strategies and to ensure that sustainability and commercial travel needs are reconciled[83]. Yet cross city findings confirm that other policy venues are usually considered more instrumental that participation at city level due to both the framing of the issue – road space allocation rather than access rights – and in the absence of established relationships with local public authorities[84].

Beyond this specific case, this constitutes a strong motivation for advocating a better integration of logistic planning into municipal sustainable strategies as well as the establishment of dedicated consultation procedures.

4.4.2 Participation through strategic alliances

Building strategic alliances and issue networks is particularly instrumental in the context of fragmented governance, as in London for example[85]. Findings suggest a high degree of flexibility among all types of stakeholders in order to coordinate and collaborate with NGOs and stakeholders from different sectors, wherever a shared interest can be found. In this regard, alliances are primarily developed on an ad-hoc, case by case basis. They seek at building support for specific campaigns and at drawing on complementary strength in technical expertise, campaigning powers and any other resources[86].

In the case of Lisbon, where forms of urban governance are characterized by strong, centralized political leadership, the above-mentioned strategic alliance with micro mobility operators also serves the mutual interest of both parties. In the case of the municipality, the memorandum of agreement is considered instrumental for capacity building and reducing the city's dependency on national authorities and expert agencies. As part of these monthly meetings, the municipality was able to develop its own data about mobility demand as well as to strengthen data analytics.

4.4.3 Participation through elections

Although often neglected in the urban research, elections and political campaigns in the context of democratic regimes offer an essential participation venue and an opportunity to advocate new approaches to road space allocation. Findings from across the MORE cities confirm that transport issues play a significant role in shaping the political agenda.In the case of Budapest more specifically, street space contestation contributed to mobilizing support in favour of political change[87]. In Malmö and Constanta, local elections have contributed to

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[83] See Annex to this report, London city portrait, p.16.
[84] See minutes from joint WP2 & WP7 technical workshop in Brussels.
[85] This confirms the work done on goal-oriented relations (Trapenberg Frick, 2016, Legacy et al., 2017). Regarding governance arrangements in London, see Annex to the D2.1 report, London city portrait, section 5.2.
[86] See Annex to this report, London city report p.13.
[87] This is consistent with findings from the CREATE project, where a comparative analysis of transport politics in London and Paris since 2000 was developed by drawing on political party manifestoes.

reshaping power relations within the ruling majority with some direct impact on the prominence of transport and mobility in the new administration's agenda. In Lisbon, election campaigns have been instrumental to successive mayors (Antonio Costa and now Fernando Medina) in order to legitimize their vision for urban futures.

4.4.4 Lessons learnt

Political capacities to engage with street space contesters are made material through different ways, traditional or innovative, formal or informal, aimed at creating a dialogue and new alliances. The choice and selection of tactics and strategies for contestation should not only be understood in a functionalist perspective, but also requires considering context specific variables, such as governance arrangements and contestation legacies. Yet these tools are rarely used in isolation from one another, as shown in the five MORE cities and are often combined with other type of action repertoires such as politicization or lobbying. They can be traditional or innovative, legal or not, direct or indirect, create a dialogue with public and private bodies or rather be based on tactical alliances against them.

4.5 Comparing cross-city findings with those from the literature review

In this section, we begin with comparing similarities and differences with findings about street space contestation from across the five MORE cities with those from the literature review. A summary table is provided below (Table 8).

Similarly to findings from the literature review, motivations to contest street space are numerous, intertwined, changing, subjective and not always directly linked to the urban or mobility plan per se. The main motivations identified were related to the protection of the environment, sociospatial justice, social well-being and equity concerns, the legacy of the car culture, access rights and micro mobility. Moreover, findings confirm the transversal nature of road space allocation as an issue of contestation and public policy-making. As such, it cuts across a number of policy domains and social interests, with a large array of actors that are likely to engage in challenging existing arrangements and contesting new proposals, the main ones being citizens, NGOs, governmental and public authorities, and business and commercial actors. The analysis of tactics and strategies to advocate new approaches to road space allocation showed that contesting actors use mainly events geared towards the public, traditional medias and digital networks, build tactical alliances through policy narratives about the symbolic use of space (liveability, branding).

Table 8: Comparing cross-city findings with those from the literature review

	Motivations highlighted in the literature review	Motivations as observed across the five MORE cities
Motivations	The protection of the environment, fears of gentrification, the "right to the city", social well-being and equality concerns, the economic value or the cost of the plan and finally the lack of public consultation.	The protection of the environment, sociospatial justice, social well-being and equity concerns, the legacy of the car culture, access rights and micro mobility.
Main stakeholders	Citizens, associations, NGOs, advocacy groups and the state.	Citizens, NGOs, governmental and public authorities, business and commercial actors.

Tactics and strategies	Events and communication to inform or/and mobilise the general public, discussions with public bodies, local authorities and the government, legal tools, tactical alliances and illegal or non-violent radical direct action.	Mass mobilizations, policy narratives about the symbolic use of space (liveability, branding), traditional medias and digital networks
Participation to decision-making processes and consultation	Exerting influence at design or implementation stage, collaborative vs. excluding.	Establishing institutionalized relationships with decision-makers (either at the local or at the national level), strategic alliances, elections

Lastly, when it comes to evolving relationships between street space contesters and decision makers, findings highlight how these groups interact with one another and with public authorities by either exerting influence on them by influencing the design and implementation plan or by increasing their accountability and participation in the project. In this context, only a small number of cities were able to establish institutionalized relationships with decision-makers at other levels of government and/or with street space contesters. In this context, strategic alliances and collaborative relations may offer an alternative approach. Yet in a number of cases, street space contesters were simply excluded from the urban and mobility plans altogether.

Overall, findings confirm how the specific interactions between outsiders and insiders are essential, as the latter tend to be the most influential or have the most influence on these contestations.

5 Street space contestation in the context of EU multi-level governance

In this section, the focus shifts away from the city level in order to consider how street space contesters engage with decision-making and public deliberation at the EU level. Findings about vertical coordination in policymaking has often shown how those interest groups and stakeholders who could afford it, thanks to both material and non-material resources, sought policy venues where the balance of forces tipped into their favour (Guiraudon 2000).

How to account for venue-shopping strategies? Issue framing and institutional competition.

In the case of street space contestation, the selection of venues may also be prioritised according to the framing of the issue, in this case city-led approaches to road space allocation such as public life or public space, as opposed to users-based approaches such as access rights. While the former push for empowering cities and strengthen their leadership role through the adoption of soft policy tools at EU level (e.g., non-binding guidelines, networking, knowledge and information, symbolic incentives, etc.), the latter have

favoured an EU-wide rule-making approach aimed at harmonizing access rights and mitigating impact.

5.1 Reconciling the regulatory approach with the subsidiarity principle

Findings from across the five MORE cities and discussions with users' association have shown how such preferences play out about two topical issues on the EU urban mobility agenda: Urban Vehicle Access Regulations (UVARs) and the future generation of Sustainable Urban Mobility Plans (SUMPs). So far, there is no binding directive on access regulations at EU level, which accounts for some profound differences across members states in the way they chose to regulate key negative externalities of urban mobility that is, issues of pollution, congestion and safety. Concrete road space allocation measures aimed at making those objectives material, such as road pricing, ultra-low emission zones, restrictions on commercial vehicles, including diesel bans, etc. have favoured a diversity of approaches across cities and within cities themselves. Moreover, their adoption and implementation has been characterized by high level of contestation thus contributing to slow down or limit their enforcement.

By issuing a set of guidelines about the governance of commercial road transport (DG MOVE, 2017), the EU Commission opened a series of consultations aimed at reducing diversity and strengthening an integrated approach to sustainable mobility planning[88]. Two series of documents were commissioned by the EU Commission as part of research-policy initiatives on public transport and urban logistics, and one action plan was produced as part and New tools and resources were made available to domestic authorities, such as networking activities[89], an online platform[90], and guidelines supporting the implementation of new regulations focused on the uses of new technologies[91]. In line with its former policy developments in the urban mobility field (Halpern 2013), this proposal seeks to reconcile a sector-led approach (issues of regulation, access rights) together with a governance-led approach (issues of scale, urban authorities). It can be summarized as follow: "Address fragmentation and patchwork of the schemes while respecting the subsidiarity principle" (Partnership for Urban Mobility, 2019, p.15). Table 9 below provides an overview of the content of these documents.

5.2 Empowering cities through access regulation

In this perspective, which is shared by a number of European cities including Budapest and Lisbon[92], and cities networks such as Polis, safety issues and ecological transitions constitute a critical driver for cities to establish themselves as "urban space managers" in order to effectively govern its street space by using various tools, such as pricing, land use

[88] This document covers a wide range of issues related to mobility and transport: (1) Information and communication; (2) Vehicle types, exemptions and (cross-border) enforcement (3) Planning, consultation and design; (4) National legal frameworks; (5) Evaluation and assessment; (6) Technology options and interoperability.
[89] Research-policy dialogues through CIVITAS initiatives
[90] Urban access regulation platform: www.urbanaccessregulations.eu
[91] For example, Regulation 962/2015 on the provision of EU-wide real-time traffic information services.
[92] See annexes to this report, Lisbon and Budapest city portraits.

planning, and prioritization mobility modes through road space allocation[93]. Moreover, the existing EU urban mobility framework, such as the Urban agenda, SUMPs and networking initiatives, should be further expanded in order to increase access to information, knowledge and funding, as well as in order to address pending and new issues such as micro mobility or freight and logistics. UVARs are thus considered instrumental to support sustainable urban transitions insofar as it does not contribute to restraining the autonomy and specificity of urban authorities. Moreover, favoring a city-led approach also aims at fostering increased integration and avoiding *ad hoc* negotiations often leading to a number of exemptions allocated per type of vehicles and users.

5.3 Harmonization as a way to overcome spatial differentiation

By contrast to those advocating a soft policy approach, users' association are supporting the adoption of more stringent rules at EU level in order to overcome fragmentation. Findings from across the MORE cities show that such claims are rarely made by cities themselves, but more so by business and commercial organizations, as well as users' federations. In the case of the freight and logistics industry[94], advocates of the regulatory approach highlight the need to overcome fragmentation and diversity within cities and member states through, first, a set of measures aimed at decarbonizing existing vehicles through new technologies and digitalization, and second, a set of rules aimed at fostering harmonization[95]. Such an approach would not prevent the adoption of exemptions, which are considered critical in order to distinguish between different types of vehicles (e.g., private cars vs. others) and activities (e.g., tourism, freight, logistics, transport on demand, etc.). In the case of users' federations (cyclists, pedestrians, persons with reduced mobility), harmonization is also considered instrumental in order to ensure increased accessibility, inclusiveness and effective prioritization. In this perspective, awareness raising and incentivization mechanisms are considered as a complement to effective changes in EU and national legislations[96].

This focus on street space contestation beyond the city level completes the work done as part of WP2 about the institutional, organizational and regulatory dimensions of road space allocation.

There again, findings from the MORE project confirm the importance of streets and their political significance in shaping relationships between levels of government in the EU: should the local level retain its autonomy in application of the subsidiarity principle, or should these issues be better harmonized in the name of dismantling Single Market barriers? This type of street space contestation also highlights venue shopping strategies in order to push for or resist road space allocation. From an analytical perspective, it confirms the need to consider

[93] See the position paper about micro mobility (Polis, 2019), as well as the multi-stakeholders guide about UVARs, examining regulations about access and space management, which was published as a contribution to the SUMP guidelines.
[94] See Annex to this report, London city portrait, op.cit.; See Minutes from the Joint WP2 & 7 Technical workshop, Brussels
[95] See Minutes from the Joint WP2 & 7 Technical workshop, Brussels.
[96] See also Annexes 8 and 9 to this report by ECF.

street space contestation beyond the urban level. This allows examining how a wide range of stakeholders, including cities, seek to represent their interests by developing strategic alliances across several levels of government.

Table 9: Main policy documents published at EU level about UVARs

Policy documents	Author/Editor, date	Main dimensions	Proposed approach / tools	Goals
Study on Urban Vehicle Access Regulations - UVAR	DG Move, 2017	Six dimensions: 1) Information and communication; 2) Vehicle types, exemptions and (cross-border) enforcement; 3) Planning, consultation and design; 4) National legal frameworks; 5) Evaluation and assessment; 6) Technology options and interoperability	- Specific recommendations for each dimension; - Process management tools: 1) UVAR schemes to be integrated in SUMPs, 2) Ensure effective consultation by establishing structured interactions with a wide range of stakeholders; - Measuring impact: 1) Enforcement techniques (i.e., ITS solutions), 2) assessment tools, both ex-ante and -post, 3) trials and experimentations - Financing through re-investing UVARs related revenues in sustainable mobility initiatives	Consistency, Noncontradiction, Inclusiveness, Consensus-seeking, Proportionality Awareness-raising
1) Pilot project study on innovative ways of sustainably financing public transport; 2) Urban logistics: an integrated perspective	1) DG MOVE, 2018 with COWI, Prognos, CENIT; 2) EU Commission, 2018, with ECORYS, Technico Lisboa, TPR Antwerp	13 deliverables, six topics: 1) Use of ICTs; 2) Treatment of logistics activities in UVARs Schemes; 3) Engagement of stakeholders when implementing urban freight logistics policies; 4) Logistics schemes for e-commerce; 5) The use of environmentally friendly freight vehicles; 6) Indicators and data collection methods on urban freight distribution.	Provide policy guidance to local and regional administrations	
Partnership for Urban Mobility, 2019		Action plan, non-binding guidelines for reducing diversity of UVAR:	Provide guidance to cities and local administrators - Platform Urban access regulations - Use of recommendations, best practices	Transparency, Digital turn,

6 Main findings and lessons learnt

The work done on street space contestation across the five MORE cities shed light on similarities and differences about the importance of streets and their political significance in different contexts. It confirms that the politics of road space re-allocation often requires reconciling diverging interest groups. Various tactics and strategies are developed in order for a wide range of stakeholders and interest groups to shape street space contestation outcomes. In this context, new forms of participation are introduced in order to balance socioeconomic interests with efforts to mitigate the effects of climate change. This work holds fruitful lessons for other cities and stakeholders seeking to introduce new approaches to road space allocation.

In this conclusive section, three major findings are highlighted in relationship with lessons to be learned for future steps in the MORE project and beyond: first, three configurations of road space allocation are identified, second, the transformative role of street space contestation is discussed in relationship with changes on urban mobility agendas, and third, the role of street space contestation in the context of multi-level governance.

6.1 Configurations of road space allocation

Exploring the motivations and approaches for contestation sheds light on the various ways through which street space contestation operates.

More precisely, findings contribute to identifying three main types of configurations that cut across the different socio-political contexts under study as part of the MORE project:

1) New road space is made available and allocated to specific needs, for example as part of newly developed urban areas. In the absence of specific losers, there is a low level of contestation.

2) The distribution of existing road space needs to be modified in order to accommodate new users, needs and policy priorities. This situation is by far the most common in cities seeking to reduce the role of the automobile by encouraging sustainable transport modes and place-making strategies. It involves reallocating costs and benefits between different interests and groups, and as such, it accounts for high levels of contestation, including institutional, political and organizational competition.

3) Access and rights to road space are redefined in order to consider new users and needs. This regulatory approach, which is dominant at national and European levels but less so at the urban level, affects the distribution of costs and benefits between interest groups in a given sector. It is often preferred by users' organizations and interest groups.

6.2 The transformative role of street space contestation

Insofar as they contribute to the understanding of if and how street space contestation was able to shape evolving forms of urban governance and policy making, findings from across the five MORE cities hold fruitful lessons for the understanding of sustainable transport transitions in cities. This is particularly relevant in regards to the work done in the first part of this study[97], which considered street space contestation as a dependent variable of institutional and organizational arrangements. By contrast, the focus on contestation dynamics allows examining whether or not contestation may, in turn, shape the transformation of urban governance. In other words, this section brings together findings from both parts of the study in order to examine the transformative role of street space contestation[98].

In many of the study cases explained through this report, contesting groups did exert influence on various levels.

- Who leads whom?

The ability to shape the urban agenda depends primarily on the dominant views adopted by political, administrative and technical elites about road space allocation. Views can be schematically divided between, on the one hand, those approaches favouring a shift away from car-oriented cities and seeking to re-allocate more space for sustainable transport a wider range of place-making activities, and on the other hand conservative approaches that seek to accommodate private cars and target free-flow traffic, propose solutions that expand road space for cars and limit provision for other modes and activities.

At the time of data collection, some variations could be observed between the five MORE cities and within cities, between political, administrative and technical elites. By contrast to local political elites in Budapest, which favoured a more conservative approach to road space reallocation strategies until the 2019 local elections[99], their counterparts in Constanta[100] and Lisbon were more supportive of these new approaches. In Lisbon[101], the current political majority has committed to a 70/30 share of sustainable transport, a 40% reduction in carbon emissions by 2050 and a vision zero strategy. These goals were reiterated following 2019 local elections and as part of the 2020 European Green Capital agenda. In the case of Malmö, technical and administrative elites proved supportive of the new schemes, but were constrained the preferences of local political officials. In London, the dismantling of resources formerly allocated to Transport for London from 2017 onwards[102] presents a challenge for

[97] See D2.1 report, Halpern and McArthur, 2019.
[98] This draws on the work done as part of the CREATE project and the contribution by Halpern and Le Galès to Davis and Altshuler (2018).
[99] See also Annex to D2.1 report, Budapest city portrait p.11. Following the local elections in 2019 and the election of the green party's (Dialogue) candidate some changes are to be expected. See Annex to this report, Budapest city portrait, p.12-13.
[100] See above
[101] See Annex to D2.1 report, Lisbon city portrait p.10, and Annex to this report, Lisbon city portrait p.5.
[102] See TfL's annual finance reports.

schemes to encourage walking and cycling since these behaviours are in line with TfL's strategic goals, but also undermine the agency's financial capacity.

- Street space contestation successfully shaping local urban transport agenda

Findings suggest that street space contestation did shape local policy agendas and led to adopting new approaches to road space allocation. Two critical mechanisms were identified.

This is first achieved through co-optation. Sustainable transport advocates are being formally included in consultation procedures and decision-making processes as observed in the case of London and Malmö for example[103]. In Budapest, some pilot projects are being led by the local transport authority in partnership with the 11th district in order to explore new forms of participation and public consultation. Another approach led city authorities to establishing collaborative relations with specific interest groups. This is the case in Lisbon, where the rapid development of private-shared mobility services fostered the development of an ad hoc consultation process to which various public agencies and organizations, universities and companies themselves have been invited.

Strategic alliances also account for local political authorities being responsive to demands aimed at reallocating road space for cycling and walking. In Constanta, pressure from NGOs and civil society organizations led the municipality to examine scope for prioritising public transport on main boulevards and for redeveloping some street space into spaces for pedestrians[104]. Similarly, street space contestation also fostered a shift in the local political agenda in Malmö. Whereas expected resistances from the wider car-user public had justified limited action to reduce space for cars, Fridays for future strikes led to initiatives to expand the space allocated to sustainable modes (walking, cycling and public transport)[105].

Co-optation and strategic alliances as two explanatory mechanisms for a change in the urban policy agenda.

- Accounting for inertia and resistances

Cross-city findings tend to confirm that street space contestations only shape local political agendas to a certain extent – an argument which confirms the critical views we found in the literature review[106]. Indeed, the relationship is not a straightforward one. Rather, it is characterized by a series of back and forth particularly illustrative of incremental patterns of change in transport and mobility policies[107].

The situation observed in Lisbon highlights these contradictions. On the one hand, local authorities and cycling associations successfully mobilised at national level to oppose measures aimed at making the wearing of a helmet mandatory for cycling and scooters in

[103] This is consistent with findings from the literature (Larsen, 2017; Freudendal-Pedersen, 2015, 2015a; Sheller, 2015; Martinez, 2011).
[104] See Annex to this report, Constanta city portrait p.5.
[105] See Annex to this report, Malmö city portrait p.6 and 11.
[106] See Badach et al., 2018, Uysal, 2012; Iveson, 2014 in the literature review.
[107] See findings from the CREATE project (Hapern, 2018)

cities. But on the other hand, sustainable transport advocates also criticize the fact that pre-existing regulations favouring car use, such as the parking policy, are still in place[108]. In their view, low-cost parking in the inner-city slows the shift towards sustainable transport and real estate developers still have to commit to building a specific number of parking places for each new commercial space or residential unit[109].

A summary of policies or initiatives adopted as a result of street space contestation in provided in Table 10 below.

Table 10: Policies developed/impacted as a result of contestation

Agenda Setting as a result of contestation	Findings across the five MORE cities
Environmental protection	- Stop of Liget Budapest project - Expand space for sustainable modes (walking, cycling, public transport) in Malmö
Right to the city / Liveability	- Redeveloping the Buda side of the Danube embankment in Budapest - Redeveloping main boulevards in Constanta in order to prioritise public transport, pedestrians, bikes and sharing facilities (e.g., Ovidiu Square) - Social Housing projects in Lisbon
Shared mobility solutions	- Memorandum of understanding with micro mobility companies in Lisbon - Revocation of Uber's license in London - Developing public micro and shared mobility solutions in Malmö
Car use restrictions	- Shift to public transport and sustainable urban planning in the Budapest Mobility plan - Infrastructure investments and regulatory changes aimed at reallocating road space for pedestrians, cyclists and public transport in Constanta - Developing a city wide strategy for sustainable urban mobility in Lisbon as part of the SUMP - Experimenting with new approaches to urban development in the Nyhamnen eco-district of Malmö.
Public health and safety	- Healthy Streets Approach & ULEZ in London - Vision zero in Malmö

6.3 Street space contestation in the context of multi-level governance

Findings from across the five MORE cities highlight the need, from an analytical perspective, to examine street space contestation and its outcomes in the context of multi-level governance. This allows revisiting some of the main issues of coordination that where discussed in the first part of this research, namely[110]:

- vertical coordination (as opposed to institutional competition),

[108] See Annex to D2.1 report, Lisbon city portrait, p.13.
[109] See Annex to this report, Lisbon city portrait.
[110] D2.1 report, Halpern and McArthur, 2019.

- horizontal coordination (as opposed to institutional / organizational / political fragmentation at the urban or metropolitan level)

- and coordination with outside government (vs lack of coordination with outside government organization).

In this regard, the focus on politics of road space re-allocation contributes to a better understanding of the various ways through which these forms of coordination are articulated with one another in each context. As such it is explanatory of evolving governance capacities at the urban level.

First the nature of the policy issue determines only to a certain extent the ability to shift away from car-centric approaches to road space allocation. In a number of cases, the politicization of road space allocation through contestation does not contribute to overcoming high level of fragmentation across different sectors and spatial scales, nor to strengthening urban authorities in their ability to shape the future of urban roads. More precisely, multi-level governance arrangements may continue shaping what is contested, how and by whom, as well as the ability of urban authorities to shape decision-making and public deliberation processes. In terms of what is contested, the cases of London, Lisbon and Budapest are particularly relevant of how the governance system itself is being challenged through road space allocation strategies. In those three capital cities, competitive relationships with national governments and/or between urban / city-region authorities and districts may hinder the development of new approaches.

Second, multi-level governance arrangements may also account for street space contesters selecting between different types of tactics and strategies. In Budapest for example, where forms of decision-making offer limited opportunities for policy outsiders, the urban political agenda is mainly shaped through evolving relationships between the national level (Prime Minister's office) and the local level (Mayor's office)[111]. By contrast, London, has often be characterized in the literature as a case of co-governance – decentralized implementation power in the context of strong interdependence – coordination and cooperation is critical in order to overcome fragmentation[112]. Similarly, in the case of Malmö, massive resources are invested in deliberative processes and political negotiation in order to address street space contestation, whereas mass demonstrations and protest has had little impact so far in reshuffling policy priorities[113]. Lastly, Lisbon offers an interesting example of resource accumulation and capacity building at the local level in a context in which a large share of powers (e.g., decision-making, revenue collection, budget allocation) is still concentrated at the national level, with the central government[114]. Over the past years, the alignment of political majorities between the local and the national levels of government has ensured some level of continuity between the former and the current administrations, which in turn accounts for low levels of institutional competition. Yet the current administration's efforts have contributed to strengthening its capacities by establishing formal relationships with

[111] See above and Annex to D2.1 report, Budapest city report, p.11.
[112] See Annex to this report, London city portrait, p.13-14.
[113] See above and Annex to D2.1 report, Malmö city portrait, p.12 and Annex to this report, Malmö city portrait, p.6.
[114] See Annex to D2.1 report, Lisbon city report, p.5.

neighbouring municipalities at metropolitan level and with micro mobility operators. By contrast, discussions with taxi drivers and Uber are led at the national level.

Overall, findings from WP2 confirm the relevance of a more systematic analysis of the politics of road space allocation. By examining the who's, what's, why's and how's of street space contestation, it sheds light on the social, cultural and political significance of streets, roads and public space in cities, alongside fulfilling a functional role. It also helps understand, beyond institutional, organizational and political factors, some similarities and differences in terms of involving the wider public alongside technical experts, planners and elected officials, and the trade-offs and tensions between different transport modes and activities. By purposefully using the notion of contestation, this contribution to the MORE project highlights the various repertoires (i.e., lobbying, protest, media, etc.) used in order to make such claims and demands visible onto the agenda and to influence decision-making in the context of the EU multi-level governance.

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MORE
Multimodal Optimisation of Roadspace in Europe

City portrait: Budapest

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

Version:	**3**
Prepared by:	**Jenny McArthur (UCL), Francesco Sarti (Sciences Po)**
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Table of Contents

1 Executive summary

Streets are contested spaces, as different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and non-government actors, this report examines the claims that are made regarding the allocation and use of road space. It also explores the ways in which different stakeholders mobilise their claims, to government actors or within the broader public sphere. It complements the work done on organizational, institutional and political dimensions of road space reallocation[1].

2 Introduction

Budapest has a well-developed public transport system, relative to many other cities, and the creation of Budapesti Közlekedési Központ (BKK Centre for Budapest Transport), the integrated transport agency in 2010 allowed more integrated planning of road spaces across different modes and activities. In recent years, road spaces in Budapest have been impacted by the growth of tourism, new mobility services such as scooters, bicycles and car-sharing, as well as changes in the leadership and structure of BKK. This study found that many groups participated in decision-making, but with diverse approaches to try and influence the outcome, including formal consultation processes, public education and awareness, and engagement with the municipality and local authorities. The primary motivations were opposition to car-centric planning processes and an over-allocation of road space to cars and parking, as well as climate change and the imperative to reduce carbon emissions from transport. NGOs and stakeholders strongly supported a transformation of the city's transport towards sustainable mobility, however they found that this was often opposed by some officials and members of the wider public who sought to maintain a larger share of road space for cars.

The range of organisations interviewed took a variety of approaches to support and contribute to decision-making. Some worked closely with the municipality or government authorities, either in formalised partnerships or collaborations, or alternatively in more ad hoc forms of communication. Others focused on engaging directly with the public to improve awareness and education about climate change, sustainable mobility and urban spaces. A key change that was observed was the shift to local communities becoming more involved in advocating for road space reallocation away from cars, alongside more established NGOs.

[1] See McArthur J., Thijs J., 2019, City portrait: Budapest, annex to D2.1 report on roadspace re-allocation. Organizational, institutional and political dimensions, MORE project, Sciences Po, Paris, 2019, 14p.

This reflected growing awareness of environmental issues and the importance of good quality urban spaces for local businesses and communities. However, there remains strong resistance from the wider public, and in turn some representative officials, to reducing spaces for cars and parking in the city. Since the most recent mayoral election, the municipality has indicated a new direction for mobility planning and stronger support for alternative modes.

3 Background: key challenges and road space interventions

Budapest has a well-developed public transport system and integrated mobility planning. In the 2000s, strong NGOs emerged in the city promoting cycling, walking and public transport. Following the creation of BKK in 2010, the agency made substantial progress in developing sustainable mobility in the city. Stakeholders recounted that this progress has slowed somewhat in recent years, although the election of a new mayor may bring another increase in road space allocation projects.

Public debate over road space allocation is robust, although it is typically fragmented across the news media and social media platforms. While the city's strategies set out goals to transition to sustainable mobility and encourage, there is still debate over the ways that these goals are related to decisions on road-space allocation

Following the changes in BKK structure, most of the progress in allocating road space in the city of Budapest is driven by EU projects. These relate to investments in infrastructures as well as soft measures. To illustrate a recent and relevant example, Cities-4-People (Horizon 2020) is operative from June 2017 - May 2020, coordinated by the Copenhagen Business School. The municipality of Budapest is in charge of two work packages, being WP4, "Pilot and Facilitating the Widespread Use of Development" and WP2, "Cities for People - Developing Mobility Communities and Tools".

In Budapest, the project involves an array of interventions in the embarkment of the Danube on the Buda side (see Figures 1 and 2 below).

Figure 1: The embankment of the Danube River on the Buda side tackle the lack of green spaces and the difficulty in accessing the riverfront (Source: Bilciu_Shutterstock)

Based on İnal Çekiçet al (2018), the main interventions include the installation of street furniture and plants/trees on community spaces; the enlargement of the staircase towards the Danube River; the placing of “floating docks” on the Danube River; the covering of the lower embankment (as shown on the left hand side of Figure 1, this is currently a street full of cars); the closure of the lower embankment on the weekends; and the establishment of mobility points to encourage the use of sustainable transportation modes, including new micro mobility services.

Figure 2: Mobility Points were established around the embankment to encourage sustainable modes of transports (Source: T.W. van Urk_Shutterstock)

These interventions aim at supporting an inclusive, human-centered approach to transportation in the city, based on three pillars: citizens participation, community empowerment and sustainable urban planning. In so doing, the main outcome of the project ought to be the involvement of stakeholders and the local population in the launch of a Citizen Mobility Lab and Citizen Mobility Kit.

4 Motivations for contestation

Streets are contested spaces, as different actors and stakeholders hold diverse views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and state actors, three dominant themes emerged as the primary motivations for challenging the way that road space allocation decisions are made in Budapest.

4.1 Parking

The supply of parking, particularly in central Budapest, was prominent in discussions with stakeholders and NGOs. They recognised that despite other interventions to incentivise people to take alternative modes, the continued provision of low-cost parking for inner city residents was a major barrier to change:

> *“When you have a flat, you can park the whole year. There was an analysis regarding parked cars: up to 50-70% of the parked cars are stored on public space (no movement).“ (Interviewee 2)*

"I think that's one of the main problems of Budapest, and going around Budapest, especially in downtown - is that if you are a local you get to park your car for pennies, in front of your house or near your house, and that's why people who actually don't use their cars in the downtown, because it's too popular, and if they move their cars then they won't have that lovely parking space in front of their house." (Interviewee 5)

The pressure to maintain the parking supply also impacted on road reallocation schemes, since schemes that tried to remove parking spaces were resisted:

"Many projects got strong pushback from local municipalities because they didn't want to change the current system, and really, it is mostly about parking - they don't want to give up parking spaces, they want to keep car lanes and the car traffic the same way." (Interviewee 9)

Since parking was managed at the district level, it was seen as particularly challenging to change in a co-ordinated way across all 23 districts. It was also viewed as a 'taboo' topic to raise, since it is under the control of the district authorities and not BKK, and also a key source of revenue for districts:

"For new buildings there have to be new parking spaces, but if you are living somewhere in the inner city, you can have a very cheap parking permit for a year. It was not designed for cars, but the municipality gives out more permits than there are spaces, and it's in many other districts as well. These parking spaces are even on the sidewalk, so it's a big problem, how you use this space - and people can just walk around... and the price for a full year is somewhere about 20-30 euros, so it's very inexpensive." (Interviewee 10)

It is evident that the challenges with parking relate to the pricing, public expectations and travel behaviour, and also the role of district authorities in ensuring that the supply is retained to support their local residents.

4.2 Climate change and sustainability agendas

A second key motivation raised by those interviewed was the increasing urgency to respond to climate change and improve the sustainability of Budapest's transport system. In particular, advocacy for sustainability agendas at the local scale was a priority for some NGOs:

"How do we do [sustainable mobility] actually, super locally, at the end of the street. How do we do sustainability where we live?" (Interviewee 8)

Those interviewed also emphasized that Budapest had ambitious goals for its transport system, but practical actions to deliver on those goals was perceived to be very slow, or alternatively, inadequate to effectively achieve behaviour change:

"Budapest has great strategic goals for traffic, but they don't really do anything to fulfil it. When it comes to big constructions and road developments, we don't really see how they fit the goals. If you want to

reduce car traffic you should reduce space for cars, and it is not happening. They maintain [the space], but they don't reduce it". (Interviewee 11)

"When the bikeshare scheme was opened and a lot of streets were redesigned, they didn't communicate it, maybe people still think that the bike share scheme is for bikers, but it's not. It's part of the public transit scheme." (Interviewee 9)

In this way, the disconnect between the implementation of new schemes and the communication of these schemes to the wider public motivated other stakeholders to become involved, to try and improve public awareness and the uptake of new investments into cycling or walking.

The involvement of young people in the Climate Strike movement was another important factor, since a large number participated in the September 2019 climate strike, illustrating the shift in norms and expectations for younger generations.

4.3 Car-centric planning

"If you look at the numbers, in Budapest, on how far we shifted to sustainable traffic modes, I mean it's really bad, the numbers - in the last ten years we have 100,000 more cars on the streets of Budapest, which you can really feel." (Interviewee 8)

The third prominent issue motivating a range of actors was the car-centric planning approach that persisted in many projects. They emphasized that despite adopting goals for sustainable mobility, and implementing projects to reallocate road space, private vehicles still dominate in many parts of the city. This had a particular impact on specific projects, which faced strong opposition when they attempted to remove road space from cars. In some cases it was sufficient to slow down or block major projects:

"When cycling infrastructure doesn't hurt other modes, mostly car use, and when there is extra space they give it to bikes. But where there would be a need of removing a regular lane, or parking spaces - that's not really happening. This can stop big projects - even if it is only about one or two car parking spaces." (Interviewee 10)

Compared to some other cities, integration between transport and property development is less strong. This means that property developers are less involved in decision-making,

"We don't have didn't have this kind of city development way of thinking in the past two decades, the mayor was quite conservative, he wasn't focusing on developing this city, and there is no transportation driven development. They are driven by the availability of cheap land, private will developers buy it, and even if they are cheap because the transportation is not good enough, they built what they want there." (Interviewee 6)

"This is not such a driver here in Budapest, there are some areas, for example, Corvin Promenade project - it's a nice old neighbourhood, which became the ghetto of Budapest, worse than Harlem, in the past 60 years,

and then we did a city regeneration - the municipality demolished a lot of buildings, moved out people, then we created a new district in this neighbourhood, because the public transportation was really good and we are in the downtown in the city. But, it's not something that the city or the mayor drivers, it's what developers are hunting for." (Interviewee 6)

Linked to the car-centric planning approach, stakeholders noted that this was supported by the preconception that the wider public preferred more road space cars. However, recent participatory planning processes and engagement with the public showed that there was more support than previously thought, for better pedestrian spaces and restrictions on car access:

"There was a reconstruction, it used participatory planning with online surveys... they asked everyone what they need, and it turned out that, not everybody is car-centric. Even the car drivers think that when they park the cars and walk home, they want to walk home on a comfortable sidewalk." (Interviewee 9)

The fact that actual public preferences can differ from what politicians expect was an important reflection raised by stakeholders:

"It's a preconception about what people who vote want... politicians assume that they want parking space and faster car traffic, especially before elections. Right now, you can see the politicians campaigning, saying that we will give you more parking, it's really stupid. People like to complain when they think there is a loss - so when they lose parking spaces, they consider it as a loss, from being able to go from A to B. They don't consider it as regaining public space, and that it will be good for them - and the city doesn't communicate it." (Interviewee 10)

This demonstrates the role of political actors and their perceptions, as a key influence to road space allocation schemes. Mobilizing and representing these changes in public attitudes, within public debates, could correct these perceptions.

5 Participation in decision-making processes and public deliberation

The second part of the analysis evaluated how stakeholders and NGOs participated in decision-making and related activities that influence mobility planning in Budapest. This includes public education and raising awareness about mobility issues, direct advocacy to the authorities, or collaboration with other actors to campaign for change.

Interviews and workshop activities showed a changing landscape for participation in Budapest. With the introduction of participatory planning for some projects, there are more opportunities for better public engagement. New organisations are also emerging, building on

the work of earlier NGOs and advocacy groups, but taking new approaches to push for change.

5.1 Younger generations pushing for action on climate change

A major feature in the local context for decision-making is the recent mobilization of younger generations to campaign for climate change. This was largely visible in the Climate Strike and Fridays for Future marches in late 2019 (see Figure 3), which attracted a large and diverse turnout. Interviewees emphasized that the approach of younger campaigners was distinctly different to the previous generations.

Figure 3: Fridays for Future demonstration, 2019 (Source: Jambor Orsolya_Shutterstock)

Extinction Rebellion, an international network of climate change campaigners, were also active in Budapest:

> *"They were very young, there were 4000-5000 people. It was 10-11 in the morning, during school time, and I think it was the biggest climate demonstration that Hungary ever... it was very funny to see that many of the speakers at the parliament were the previous generation of environmentalists, and to see the difference between the young high school or university students, than the people in their 30s or 40s, like how they were speaking, it was very different." (Interviewee 9)*

> *"Extinction Rebellion, they had some demonstrations - air pollution in the summer, they cooperated - one girl came here to ask what they should write on the banners." (Interviewee 10)*

What is notable about this movement is the use of mass demonstrations and marches, as well as advocacy through the media and social media platforms. This is important to provide physical demonstrations of the size of youth support for climate action, however, their activities are primarily focused on building public support. They are less active in mobilising and advocating for specific policies or projects, nor do they engage significantly with decision making for individual projects.

5.2 Seeking to improve public engagement with the municipality

A common strategy adopted by NGOs and other stakeholders was to work on public engagement with the municipality or BKK. In this way, actors participated in decision-making for specific projects through a range of communications with authorities as well as the public. The approach is institutionalised for some stakeholders and NGOs, but not all have a clear route to engage with the authorities or around specific projects:

> *"I think we can reach a very diverse public, we can see that because sometimes we try to engage in conversations that are big words - about society" (Interviewee 11)*

> *"It's very project based, so it's linked to a certain project or space change, then we go and lobby - we write to them and then we go to this audience, meeting with them" (Interviewee 8)*

Actors noted that media coverage of transport and planning issues did not always support good public engagement and awareness of mobility issues. This left an opportunity for other groups to engage in education or awareness activities:

> *"In the independent media there are some writers who write about cyclists, but they only talk about the problems, and in the government-related media they write about cycling a lot, but usually only when there is a new bike lane opening somewhere, or a government official is saying something." (Interviewee 9)*

> *"The media is a great influencer, they decide what things are put into the public focus. So people are angry if something is not going in the right way." (Interviewee 3)*

Interviewees noted that many people were relatively disengaged in decision-making for mobility planning. NGOs in particular had an important role in demonstrating to the public how they could engage with authorities. Related to this, they sought to improve public awareness about public spaces, including green spaces, the Danube embankment and city centre:

> *"In Hungary, usually people don't have the feeling that their voices are heard. But the bike association is the best role model for this - they made it to be heard." (Interviewee 7)*

> *"Our thinking behind it was that people don't - because people didn't really use these spaces in the city centre, and you cannot start to lobby for something when nobody really cares for it." (Interviewee 8)*

However, there was often some resistance from the public where engagement promoted a reduction in car use.

> *"In our social media we see that if we post something about how little space is left on the pavement for people to walk, people are really engaging with that in the way that they are outraged. But if we post*

something which is related to promoting sustainable transport, then they are like 'no, don't tell me to leave my car at home'". (Interviewee 11)

Social media platforms create an important space for deliberation and advocating for road space allocation schemes. The experiences of stakeholders interviewed in this study found that Facebook, in particular, is an effective way to share ideas and support debate, going into more detail or depth than traditional media coverage.

5.3 Stakeholders seek to mobilise roadspace allocation as a measure for sustainable mobility

A third focus of stakeholders, whether NGOs, industry stakeholders or community organisations, was advocating for roadspace allocation as a key instrument to achieve sustainable mobility goals. They adopted evidence-based arguments, showing that the current system did not allocate a fair proportion of space to sustainable modes, even though a large share of the population travelled in this way:

"Sometimes 2/3 - 3/4 of people are using sustainable transport modes in the city, and this is not reflected at all in the way that we share public spaces. This is very typical in many cities where there is a kind of elite projection in the way we look at managing our public spaces. The decision making and opinion forming elites - including sometimes journalists, not just the politicians that make final decisions - most of them are still car users and are not experiencing the reality of living without a car in the city, it's very hard to change it" (Interviewee 1)

This also involved the use of planning expertise from other cities, such as the Healthy Streets guidance produced for London:

"The publication [Hungarian translation of Healthy Streets] shows that there are good examples in Budapest, it's more the strategic thinking is missing. That's the thing that I'm looking out for, from the NGO or third sector, or demand from the general public, to create this change" (Interviewee 11)

Interviewees also noted that the authorities had produced valuable policy documents on sustainable mobility, but that these were not necessarily shared with the public, and so they used social media to publicise them:

"We do have, for example, a climate strategy that was accepted by the Budapest Commission of Mayors. The first half had a SWOT analysis and what Budapest needs to invest in and things like that, and it was very, progressive - this is a great thing... and no one really talks about it. The city isn't promoting its own climate strategy, so we started posting it on our social media to promote the climate strategy" (Interviewee 11)

"if Cities for People is successful, they will do the necessary changes in the [shared mobility] regulations, and then we could have a network which people can get used to, and the big thing would be to have this network throughout the downtown, because then people are more likely to use

micro-mobility, because there is a parking issue, it's hard to find parking places in the downtown - but it needs some forward thinking from the participating local governments as well." (Interviewee 4)

5.4 New coalitions forming from community level, pushing for change and demonstrating that there is a desire for alternative uses of road space

Lastly, new coalitions at the local level were emerging beyond the established NGOs for cycling and public transport. These groups were more diverse and advocated for the reallocation of road space as a way to improve local quality of life, conditions for businesses and cultural amenities:

"Bartók Béla út, it's a good example for stakeholder cooperation for advocacy. The city of Budapest, BKK, planned a redesign of the street. A local group was the first to initiate a bike lane there in 2005, then the technical university measured and planned it. The district really liked it because they wanted to change the whole street to a more cultural area with galleries, restaurants, cultural things there, as well as the university of technology and economics." (Interviewee 1)

Social media and other online platforms play a key role in enabling local groups to organise and deliberate over changes.

"Forums and blogs helped a lot for us, for getting in new perspectives of urban planning to the public discourse. When the movement became bigger, the first critical mass was organised - it was the same time that forums were becoming popular and we had IT specialists who built sites and forums and online community places." (Interviewee 9)

However, social media also posed some challenges, because of the way it can be used to mobilise negative as well as positive messages about sustainable mobility:

"Facebook is also a very useful tool, that we can be on media, but it's also very un-useful in different ways. We get into these echo chambers - when there is a very upsetting thing happening, like cyclists crossing a red light or something, they take away a parking space, people get enraged there, and then it is unstoppable and you can't coordinate what happens in local forums and Facebook groups" (Interviewee 10)

6 Future scenarios in the city of Budapest

Recent changes in Budapest, which took place after our second on-site visit, indicate that there is possibly more activity planned in road space reallocation. In October 2019 the municipal elections had a surprise result, with leader of the Green Party Gergely Karácsony elected as Mayor of Budapest, with the support of a broad alliance of parties and movements; ranging from the far-right party Jobbik to the socialist party MSZP. This section

mainly draws on media sources as well as input provided during the 2nd MORE project Assembly of Partners meeting in Budapest[2].

6.1 What are the new priorities?

The new majority in the council aims to modernise the city, with mayor Karácsony promising a green revolution in Budapest. The campaign promised to dramatically improve transport accessibility, develop green areas in the city, improve air quality and health care, reform the housing market and prioritise climate protection.

The announced reforms imply new investments and regulations in support of public transportation and active mode of transports. In doing so, the greatest challenge still relates to the decrease of private cars. Among the key measures included in manifesto "Vegyük vissza Budapestet!" are:

- Free transportation for youngsters up to 14 years old;
- Introduction of a unified ticket and pass system;
- Establishment of a basic transport income;
- Development of a fast and efficient high-speed (S-Bahn) railway system;
- Support for sharing solutions and facilitation of their connection to public transport;
- Development of fast and secure cycling core network for easy transport between districts;
- Cycling friendly downtown highways.

In this sense, one of the first official act of the new city council on November 7th, has been the approval of Karácsony's declaration of climate emergency: "Recognising that climate change presents a fundamental threat to people's welfare, a peaceful society, and the living conditions of future generations, the General Assembly assesses that there is a climate emergency" (Morgan, 2019).

6.2 What are the implications for multi-level co-ordination?

Both President Orban and the Mayor Karácsony have declared their willingness to cooperate for the good of the capital-city. However, the change in the city's leadership represents a shift in the power balance between local and national actors. In view of the general elections in 2022, the coming years could see new coalitions and forms of opposition that influence road space allocation.

As suggested by Mayor Karácsony's prior and after to the election, this change in the political outlook it likely to impact mobility issues. Mayor Karácsony's local agenda takes a different approach to the national vision for Budapest mobility system (Párbeszéd Magyarországért, 2019). President Orban has issued the mayor to take a quick decision on state capital investments in response to Mayor Karácsony's declaration to veto the construction of more state-funded stadiums in the capital (Budapest Business Journal, 25/10/2019)[3]. The mayor

[2] See also the updated timeline provided in the cross-findings section of 2.3.
[3] This relates more specifically to the changes brought to the new athletic stadium's project. This infrastructure is planned to host the 2023 World Athletic Championship. Mayor Karácsony and Mayor

also declared that the City Council will stop issuing building permits for the Liget Budapest project (Budapest Business Journal, 17/10/2019), a government investment in Budapest City Park to build a series of museums and a theatre. As mentioned repeatedly by a number of local stakeholders during the first part of this study (Halpern, McArthur, 2019 and McArthur, Thijs 2019), this large urban redevelopment project is contested because of the environmental impact it may have by taking up “one of Budapest’s few and very precious green areas”, said the newly elected mayor (Global Construction Review, 03/12/2019).

7 Conclusions

This study found a dynamic local context in Budapest, with a variety of organisations and stakeholders non-government actors advocating for new approaches to road space allocation. Similar to many cities, there was strong contestation between those promoting sustainable transport modes and drivers, who wished for space to be maintained for cars. This was particularly prominent in relation to parking, since residents in the inner city have subsidised parking. Management of this parking is decentralised to district authorities. The growing public support for climate action also has implications for road space allocation, since this policy agenda requires significant reductions in carbon emissions from transport.

A wide range of actors interested in mobility engaged in a range of activities to influence decision-making for road space allocation. This varied from public education and engagement, to direct communications and partnerships with authorities to provide feedback and mobilise public preferences. The main debates around road space allocation showed strong opposition between travelers using different modes, particularly private vehicles and sustainable modes such as walking, cycling and public transport.

7.1 Continuing need to address challenges of regulations supporting car use while strategic goals seek to reduce it

A major source of opposition between different actors was the discrepancy between the city’s strategic goals for sustainable mobility, and the actual implementation of road space allocation, which often maintained or expanded space for cars. Stakeholders and NGOs said that this would continue to be a source of contestation for individual projects, where designs were changed or the project itself was halted if it was perceived to take away too much space for cars. As a result, the city’s overall plan for sustainable mobility and public spaces was implemented in an uneven fashion, with some projects missing or revised to reduce their overall value to improve roads and public spaces. The announcements of the new mayor indicate that the city may take a stronger approach to supporting alternative transport modes and protecting urban green spaces. Going forward, the way that the municipality manage the supply and pricing of parking, and the implementation of new road space reallocation projects, will be critical to the success of the city’s agenda for sustainability and climate action.

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of District IX proposed to amend existing plans in order to also take into account the needs of local residents (Hungary today, 25/11/2019).

Newer coalitions organising and advocating at the community level to improve public spaces, walking and cycling infrastructure, may influence contestation that typically comes from different modes or user groups. These coalitions campaigned for road space reallocation as a means of improving the local economy and cultural amenities, which may be able to build support amongst key local stakeholders.

7.2 Need a clear path for constructive, ongoing engagement with NGOs

Another important issue raised was the role of NGOs and external stakeholders in engaging with authorities and the wider public. While these actors play an important role to support public engagement and awareness about sustainable mobility, they often do not have a clear role within the decision-making process. In Budapest some NGOs have formalised partnerships, however many have had very limited access to the authorities and decision-makers, creating challenges to engage with the public and help to build support for road space reallocation.

As new movements emerge, particularly by younger generations, there is an opportunity to develop the capacities of these groups to build public support for new approaches to road space allocation. While they have sometimes operated in opposition to the authorities in recent years, the new direction of the new municipal administration may create opportunities for collaborative working and extension of the participatory approaches that the municipality have started to use for road space projects.

8 Interviews

Number	Type	Interview type	Date of interview	Members of team present
Interviewee 1	Government stakeholder	Face to face	01/10/2019	J. McArthur,
Interviewee 2	Government stakeholder	Group Interview	07/05/2019	J. McArthur, C. Halpern, C. Koszowski
Interviewee 3	Private sector stakeholder	Skype	31/10/2019	J. McArthur
Interviewee 4	Private sector stakeholder	Face to face	01/10/2019	J. McArthur
Interviewee 5	Private sector stakeholder	Face to face	01/10/2019	J. McArthur
Interviewee 6	Private sector stakeholder	Skype	18/10/2019	J. McArthur
Interviewee 7	Private sector stakeholder	Group Interview	07/05/2019	J. McArthur, C. Halpern, C. Koszowski
Interviewee 8	NGO	Skype	29/10/2019	J. McArthur
Interviewee 9	NGO	Face to face	01/10/2019	J. McArthur
Interviewee 10	NGO	Face to face	01/10/2019	J. McArthur
Interviewee 11	NGO	Face to face	02/10/2019	J. McArthur

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MORE
Multimodal Optimisation of Roadspace in Europe

City portrait: Constanța

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

Version:	**3**
Prepared by:	**Jenny McArthur (UCL), Francesco Sarti (Sciences Po)**
Checked by:	**Charlotte Halpern (Sciences Po)**
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Table of Contents

1 Executive summary

Streets are contested spaces, as different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and non-government actors, this report examines the claims that are made regarding the allocation and use of road space. It also explores the ways in which different stakeholders mobilise their claims, to government actors or within the broader public sphere. It complements the work on organizational, institutional and political dimensions of road space reallocation[1].

2 Introduction

In Constanța there is strong pressure on road spaces to accommodate private vehicles, public transport, walking and cycling. The city has introduced new schemes to reallocate road space to walking and cycling, such as the pedestrianisation of Ovidiu Square and refurbishment of the promenade around the Casino. Efforts to rebalance the allocation of road space between private vehicles, cyclists and pedestrians are continuing, with a new parking strategy and plans to invest in upgraded public transport facilities.

Interviews with a range of stakeholders and NGOs found that Constanța has an emerging network of civil society groups and public actors under the current administration, who support sustainable mobility and are engaging in a range of activities to build public awareness and support. These range from direct advocacy with the municipality and state actors, to more indirect approaches to improve public education about urban planning and mobility. PMC's goal is to restrict access for cars in the city centre, through pedestrianisation and shared spaces, supported by the current parking strategy. Alongside these interventions, there is active public debate about the level of access that cars should have access to inner areas, as well as a legal case in opposition to removing car parks for commuters.

The main points of opposition in Constanta arise between the wider car-driving public and the efforts of the municipality, supported by NGOs, to reallocate roadspace to pedestrians, cyclists and public transport. There was also debate amongst NGOs and stakeholders over the way in which the city's sustainable mobility plans were implemented, emphasising the importance of public education and communication about the benefits of road space

[1] See McArthur J., Dumitrescu D., Zagan L., Cristea L., 2019, City portrait : Constanța, annex to D2.1 report on roadspace re-allocation. Organizational, institutional and political dimensions, MORE project, Sciences Po, Paris, 2019, 22p.

reallocation. Nonetheless, under the current administration, stakeholders and NGOs are more active in decision-making for sustainable mobility and can be effective in raising awareness and building political support. The strong 'car culture' and public mentality towards driving presents a challenge for reallocating road space, however, the municipality's efforts to implement clear communication of new projects and support transparent consultation can improve engagement and manage opposition to changes.

3 Background: key challenges and road space interventions

In recent years, the rapid growth in vehicles in Constanța has resulted in significant traffic congestion, as well as a surplus of private vehicles compared to the city's supply of parking spaces. This led to a large number of vehicles parked in pedestrian areas, creating safety hazards and obstacles to walking and cycling. Across the wider public and NGOs, there are differing perspectives on how much space and accessibility should be given to cars. Like many cities with a large proportion of people who travel by car, there is strong support for expanding road spaces for cars, in the hope of reducing congestion and expanding the supply of parking. However, there is clear recognition by NGOs and the municipality that the city's transport system requires management and regulation of access for vehicles, accompanied by investment in public transport and infrastructures for walking and cycling. These components are important to support sustainable mobility over the long-term, and are well-supported by European Union funding programmes.

Major road space reallocation schemes in recent years include Ovidiu Square, pictured below (see Figure 1), which was closed to vehicles and restored as a pedestrian square with seating and areas for outdoor dining.

Figure 1: Ovidiu Square, before (left) and after pedestrianisation.
Image credits: Left: Flickr user ToSter [CC BY-SA 3.0]. Right: J. McArthur's photo.

The provision of EU funds are a major driver and resource for changes to mobility planning. For example, the CIVITAS PORTIS project has supported a range of collaborations between local actors, and interventions to promote public transport and innovative technologies.

At present, the city is planning to implement a new parking strategy that will introduce stronger regulation of car parking and encourage the use of alternative transport modes. There are also planned investments to upgrade the public transport vehicle fleet and ticketing system, and refurbish the city's main boulevards: Alexandru Lapusneanu Blvd./1st Decembrie Blvd, and 1st May Boulevard/Managliei street. The street refurbishments will rebalance the allocation of street space by introducing bus lanes and cycle lanes, and improving footways.

4 Motivations for contestation

Streets are contested spaces, as different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and state actors, three dominant themes emerged as the primary motivations for challenging the way that road space allocation decisions are made in Constanța.

4.1 Cities for people, not for cars

NGOs and stakeholders in Constanta expressed a strong desire to transform the city into a place where space for people is prioritised over road space for cars. Actors recognised that the city's infrastructure did not adequately support walking and cycling, even if some residents preferred to travel in this way:

> *"The main motto is that we want a city for people and not for cars. We focus very much on pedestrians, cyclists - because we lack infrastructure for these activities and means of transport" (Interviewee 7)*

> *"There is a need for pedestrian spaces or public spaces dedicated to pedestrians and not to cars. In the last 20 years, the development of the city hasn't been for the citizen as much, in terms of public space and using the public space" (Interviewee 5)*

This agenda is also promoted by the municipality, who have interventions underway or planned to change infrastructures and regulations to reallocate road space for pedestrians, cyclists and public transport users:

> *"They are trying to enlarge some main boulevards in order to prioritise public transport, and to redevelop areas in the city for pedestrians, making soft projects like developing the alternative space of transport, bike sharing facilities" (Interviewee 2)*

The imbalance in road space allocation between people and cars is particularly notable for parking, where parking spaces take up pedestrian areas or parts of the street that could be used for cycling. There are also restricted street widths, which mean that there are inevitable trade-offs between space for cars, public transport, walking and cycling:

> *"One of the biggest problems is about parking spaces, because this is a very crowded city - the streets aren't wide enough. They don't have enough*

lanes for the cars, not to mention the dedicated bus lane, it mostly doesn't exist in this city. Bicycle paths are almost non-existent, unfortunately - we have some areas in the city dedicated to pedestrians but they are not used as much as they should be used, particularly this area here close to the city centre" (Interviewee 7)

"Parking is very important here in Constanta, as I know, it is four cars for every parking space - in my opinion it's more than 7-8 cars for every parking space" (Interviewee 3)

Parking is also a challenge for disabled travellers, since it is not distributed adequately across the city. Also, limited enforcement practices means that they can be taken by other travellers. While there are legislative provisions for accessibility in public space, these are not always enforced:

"One particular issue is related to parking, because with people with disabilities have dedicated parking spaces but they're not sufficiently well-spread. Local institutions - larger ones - have them, but smaller, not so much. And enforcement would be an issue because sometimes they are not free and the city hall or local council should be monitoring this." (Interviewee 6)

"Theoretically there is legislation for disabilities, but the problem with Romanian legislation is that there is a very good set of rules, borrowed from the European rules, but no sanctions, and nobody to apply those sanctions. So even though there are rules for instance, for roads, how to design roads and how to place benches, where to place accessibility features and stuff like that, that problem is that there is nobody to check. (Interviewee 9)

Despite the recognition of the municipality and many stakeholders that the approach to mobility planning had been too car-centric in recent years, this view is not always shared with the wider public.

4.2 Public mentality towards travelling by car

A second important motivation for those seeking to influence decision-making was the strong mentality toward driving and 'car culture' in the wider public. This is a challenge for road space reallocation because there is public opposition to changes that reduce space for cars, or limit access.

"Many people here, they travel with their own cars, it's necessary to change their behaviour…. The city wasn't built for cars, and even at the beginning it catered to a much smaller number of cars, so there just isn't sufficient space" (Interviewee 1)

"Some [companies and entrepreneurs] have to understand that their big cars, like trucks... they can not leave them inside the city on small roads,

making it almost impossible to circulate on that road, because the driver is leaving it there." (Interviewee 4)

Specifically, this perspective often perceives a reduction in space for cars as a negative, rather than a positive benefit to support walking, cycling, and the use of public transport. However, it was recognised that unless good quality alternatives to driving are provided, it is very difficult to find success with measures that restrict space for cars:

"At the moment, all change like putting pillars on sidewalks and restricting access is perceived as a problem, people are worried about what they will do with their car, not considering the opportunity to walk. They are not perceiving the change, the fact that they could not use the car and then walk. At the same time, it is important to provide alternative methods, improve public transport and make it attractive for citizens so that it becomes a viable option to car use" (Interviewee 5)

This demonstrates that public perceptions are very important to influence the way that they react to proposed changes. The expectation that road space should be prioritised for drivers or car parking shows that many do not view public spaces as areas that should be maintained for people, and so shifting this mindset and communicating how road space can be used differently is a key task.

4.3 Consideration of citizens' needs in public consultations and decision-making

Public consultation on planning decisions and new road schemes were another key issue raised by NGOs and other stakeholders. While the purpose of consultation is to gather public opinion, knowledge and feedback on specific plans, stakeholders felt that there was not enough consideration given to their views:

"[Consultation] was like, ok, we make this debate, we invite some people here, you share your opinions - we put them down on paper and that's it. No one actually changes anything because we already had the final plan, but we had to check also these debates in the end. So that's why people usually say well, we don't consider that going to a debate and sharing with the municipality our ideas or concerns, will be helpful. Because in the end, they will do whatever they want, and we will lose our time and energy trying to change their view." (Interviewee 10)

"It's very challenging how the street space is allocated in Constanța right now, where they do their work, in that area the infrastructure is quite limited and the traffic is very intense. So these are basically barriers for people with hearing disabilities." (Interviewee 6)

This was not solely due to the municipality's approach. Prior to the current administration, public engagement in decision-making was limited and few were able to meaningfully participate in decision-making. In this way, the public are not in the regular practice of participating in consultations, sharing their views and influencing decision-making:

"The mobility plan was a tentative tool to create a debate, but it wasn't really very well put in practice. And this is something that isn't just municipalities' fault, but also because the people of Constanța don't know how to engage in debate - they don't have this exercise." (Interviewee 10)

To address this, some actors focused heavily on education and public awareness, to equip the public and motivate stronger engagement in decision-making for mobility planning:

"Our main purpose is [to encourage] the children want to be prepared, even for their age, to get involved. We had some activities in Constanta, volunteering activities like this, and they wanted to get involved - even if they are kids, at school." (Interviewee 7)

Again, these quotes demonstrate the strong support for change from certain stakeholders. They emphasised that education and knowledge are very important drivers behind contestation. For many individuals, it was their own professional education or experience in different cities that motivated their contestation of road space allocation in Constanta.

5 Participation in decision-making processes and public deliberation

The second part of the analysis evaluated how NGOs and other stakeholders participated in decision-making and related activities that influence mobility planning in Constanta. This includes public education and raising awareness about mobility issues, direct advocacy to the authorities, or collaboration with other actors.

5.1 Facilitating public debate to improve engagement in decision-making

As mentioned previously, the current administration is more open to promoting sustainable mobility and engaging with the public. As a result, NGOs are also seeking to rebuild their activities in the city:

"The NGO community is very small and it's beginning again after many years of no activity, people are starting to organise themselves and try this exercise of civil society again… The new municipality is more open, at least we have a dialogue... and now we are starting again from ground zero. We have to build trust in the municipality that what we want is what the community wants, and we want things that are good for everyone." (Interviewee 10)

Stakeholders often acted as mediators between the wider public and the municipality, by improving public awareness and education about mobility and then demonstrating to the authorities that there is public support for new schemes:

"So we try to be a mediator between the two, with a bigger focus on the public and the citizens, because we consider that they can make a more effective change than the municipality [alone]" (Interviewee 10)

"We have some examples of [education campaigns] and I totally agree, that part of the education of the public, is the education even of the council, the city administration, how to communicate with this... and I think these types of projects are helping them to understand that they have to communicate and to create this" (Interviewee 4)

NGOs were active in helping to foster better public debate over road space reallocation, since media reporting did not always present a balanced argument of the positive and negative impacts of new schemes. To do this, they used a range of activities to communicate to the public, improve education and foster debate. This included education programmes in schools, public events, campaigns, and cycle hire schemes.

"We do promotional behaviour change campaigns, operational campaigns on bikeshare systems developing this, whatever is about the bike, we do this. But it's one of the main pillars - but it's not the only pillar we do. we also do air quality, waste management, education for authorities, companies and children at different levels, different kinds of projects." (Interviewee 8)

While activities on social media and speaking to the press had an important role, although those interviewed also stressed the need to engage directly with the public and go beyond participation in debates or posting on social media:

"We need to have more NGOs involved, not just on Facebook and in meetings from time to time. We need to help people to understand what quality means, in our spaces, our cities, our neighbourhood - because most of them do not have any contact with this kind of information, they have no idea that things can be better. We have to help them to see and that things can be better - and they need to understand how this is possible." (Interviewee 7)

"We also started to professionalise ourselves much more, so, going to courses, understanding the problem and in which direction we go - finding partnerships, especially international ones, which were providing and having a permanent dialogue with all stakeholders." (Interviewee 8)

Engagement of the wider public in decision-making requires ongoing work, to communicate the benefits and build support for road space reallocation. Reallocation schemes are often based around the need to improve environmental sustainability and climate change, however there is more work to be done to engage the public in these issues. Actors emphasised the importance of working both with the public and the administration, to help facilitate better decision-making.

"[Public debate] is very limited, we started to have this kind of debate in the media when we talk about urban transportation, when there's a strike of

taxi drivers over Uber licenses, things like this. When they close two roads to make a passage or something, and people start to yell that they stay another two hours in the traffic, and there are very few really promoting cycling as a real alternative. So they say, oh, there is a new bike lane, and then it's a scandal because the taxi drivers are not happy." (Interviewee 8)

"The climate march was not so popular in Constanza. I think in order for things to really change, we need more exercise in working with citizens, not necessarily as I said at the top level of the municipality, but at all levels." (Interviewee 10)

Continuing to build trust from the public is a key part of this work, to reassure them of the credibility of consultation processes and motivate people to participate in decision-making.

"It's very difficult to involve people and say, be involved and share your view because you can make a change. People are very distrustful. [However] the municipality has a phone app where you can report issues related to streets, waste, whatever… [The people] said oh, nothing will change, but I reported and the municipality came and solved the issue, I had answers from them. They need these small successful examples so they can understand why they would want to be involved." (Interview 10)

5.2 Challenging technocratic approaches to decision-making

NGOs and stakeholders highlighted that decision-making was heavily shaped by technical or legislative constraints, and did not give enough consideration or flexibility to accommodate the needs of people. This is particularly challenging where stakeholders and the wider public do not have the technical knowledge to understand these constraints, which frustrates their efforts to participate in decision-making:

"[The municipality] are working with people [from civil society] who are not necessarily professionals, instead they are doing this because it is their interest, their passion. They do not necessarily know all the legislative aspects. I think, for the municipality, it's important to understand that for citizens, they have an idea or an opinion, and they don't have to justify it with legislation." (Interviewee 10)

In light of this, stakeholders suggested that a different approach was needed to better accommodate citizens' actual level of knowledge of the technical and legislative issues. This covered both the preferences of citizens, and also supporting statistics or data on travel needs:

"So this is the way that we should change the approach, because if you want citizens to come and share their opinions, that means that you don't have yet a complete formed opinion, you just want other ideas. It's a learning process." (Interviewee 10)

"I think that what the administration needs the most would be to have a correct estimate of the population with disabilities that live in their city, and

their areas of interests, their needs, and the correlation between traffic and destination. So if you want people to circulate, to travel through the city, you need to have destinations for them to go to. A museum, or a beach, or whatever else." (Interviewee 9)

5.3 Advocating for better sequencing of measures to reallocate road space

Interventions to reallocate road space have both positive and negative impacts, such as increasing the space given to particular modes, regulating speed or access, and concurrently limiting space for other modes. The sequencing of interventions to manage the trade-offs between different modes and activities is important, to manage public opposition.

Stakeholders and NGOs emphasised that the interventions planned for Constanța, including the parking policy and public transport improvements, should be sequenced to align the timing of incentives and disincentives for switching from driving to other travel modes. They warned that implementing disincentives that restrict access to road space or parking before the alternatives are in place could have a counterproductive impact:

"Just introducing a tax to reduce pollution doesn't solve the problem. The public transport has to be well organised, so that urban planners can promote and explain better to the public, while at the same time providing an alternative that supports the reduction of car use." (Interviewee 5)

"People need to travel, and they need an alternative option, so that the reduction of car use or ownership will be possible... the important issue now would be to develop public transport so that it becomes an alternative to car use" (Interviewee 5)

Providing alternatives to driving is important because of the strong mentality towards driving, which means that the public are likely to react negatively to restrictions on driving if there is not an alternative way to travel:

"The biggest challenge is the mentality of people and also how fast the municipality is moving with the enforcement of local regulations and all the projects that they are developing now" (Interviewee 2)

"A different issue aside from car use, is the metropolitan area residents using cars, and coming to the city, and needing parking - because they don't have any alternative for the moment." (Interviewee 1)

In addition to this, investing in interventions such as public education and awareness campaigns can directly target the behavioural change, as an effective complement to changes in regulation and infrastructures:

"People will be more comfortable to say, I want to go with my car, and have more parking spaces in front of my house, in front of the shop. And there

are no public policies to change this mentality, no working together with NGOs and no investments." (Interviewee 8)

This demonstrates that resistance to road space reallocation schemes can arise if interventions that restrict access for cars, or make it more difficult to drive, are implemented before alternative travel modes are improved.

6 Conclusions

This study on the role of stakeholders and NGOs in mobility planning in Constanța showed that they broadly support for the municipality's strategy for sustainable mobility and improving the quality of road spaces for more diverse uses. In terms of formal participation in decision-making, the creation of a mobility forum through CIVITAS PORTIS has significantly improved communication and deliberation between key stakeholders. Outside formal mechanisms for participation, a range of actors and groups are working directly with the public to improve understanding of how road space reallocation can improve the city's public spaces and support sustainable travel. However, there are challenges to reallocation schemes, arising from a strong public preference towards travelling by car and opposition to reductions in road space or parking for cars. To counter this, public education and clear communication of the benefits is important to demonstrate to the public how different travel behaviours are possible if road space is reallocated.

Stakeholders highlighted that the openness and improved dialogue with the current municipality is allowing the development of stronger civil society and industry organisations in Constanta. As these groups continue to mediate between authorities and the wider public, and build public support, the municipality have an important complementary role. They can ensure clear communication to the public about the costs and benefits of new interventions, facilitate consultation processes that show to the public how their views are incorporated into decision-making. Additionally, investing in complementary measures to address the strong public mentality towards travelling by car may be necessary to support behaviour change.

Two themes emerged as important challenges and considerations, given the stakeholders' approach and motivations to contesting how road space is used. First, more formalised channels for external stakeholders and NGOs to work with the municipality, to mobilise their views and contribute to decision-making. Second, ensuring that public communication is adequate and provided in a timely manner can reduce negative reactions or resistance to new reallocation schemes.

- Clear channels and guidance on how NGOs and stakeholders can engage with the municipality

Many stakeholders commented on the openness of the current administration, to adopt more progressive approaches to mobility planning and engage more closely with external actors. The mobility forum established through CIVITAS PORTIS is a good example of this. To further support public deliberation and engagement in decision-making, clearer channels for community organisations and NGOs to be represented and contribute to deliberation can

empower these actors to play a stronger role, both in their engagement with the municipality but also in helping to build public support and understanding of road space reallocation schemes.

- Need to improve public communication and awareness

Ensuring that the municipality's planned changes to improve sustainable mobility are communicated effectively to the public was also highlighted as a key intervention, complementary to changes to the physical layout of roads. This can help to inform the public about why changes are being made, improve education and understanding of the value of upgraded streets. It also supports broader engagement with the municipality by demonstrating transparency and strong communication about the purpose and value of public projects.

7 Interviews

Interviews for the Constanta case were supported by European Integrated Projects, to assist with interpreting and facilitating expert interviews.

Number	Type	Interview type	Date of interview	Members of team present
Interviewee 1	Government stakeholder	Face to face	22/10/2019	J. McArthur
Interviewee 2	Government stakeholder	Face to face	23/10/2019	J. McArthur
Interviewee 3	Government stakeholder	Face to face	23/10/2019	J. McArthur
Interviewee 4	Private sector stakeholder	Face to face	25/10/2019	J. McArthur
Interviewee 5	Private sector stakeholder	Face to face	23/10/2019	J. McArthur
Interviewee 6	NGO	Face to face	22/10/2019	J. McArthur
Interviewee 7	NGO	Face to face	22/10/2019	J. McArthur
Interviewee 8	NGO	Face to face	25/10/2019	J. McArthur
Interviewee 9	NGO	Face to face	25/10/2019	J. McArthur
Interviewee 10	NGO	Face to face	22/10/2019	J. McArthur

MORE
Multimodal Optimisation of Roadspace in Europe

City portrait: Lisbon

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

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Table of Contents

1 Executive summary

Streets are contested spaces, as different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and non-government actors, this section examines the claims that are made by different actors, regarding the allocation and use of road space. It also explores the ways in which different stakeholders mobilise their claims, to government actors or the wider public. It complements the work done on organizational, institutional and political dimensions of road space reallocation[1].

2 Introduction

Lisbon is witnessing a key transition in the city's approach to urban planning, triggered by the sustainability challenges, the impact of tourism and shared-mobility technologies. The regeneration of the city centre brought into many resources the Portuguese capital. However, it has also created new challenges in re-allocating road space. For this reason, the municipality's vision focuses on improving the mobility system and reducing the number of cars circulating in the streets. This vision has resulted in contestation from some segments of the population, who disagree with the approach to reduce cars, or the broader socio-spatial changes in Lisbon. Although, the municipality's inclusive approach to stakeholders limits the possibilities for non-government actors to contest decisions. While the overarching vision and agenda for road space allocation is set by the city's leaders, Lisbon still has a broad space for deliberation, where many actors participate in, and contribute to decision making by mobilising expertise and making their views heard. Expert knowledge is an important input to decision making: it is deployed in key actors' discourses and practices, where media - and in particular social networks - are crucial tools to promote the municipality's vision. In addition to this, the city's branding strategy is also significant. It aims to attract investment and increase tourism, while also providing a cohesive political vision within the city for key stakeholders to work together. This also has some effect to reduce contestation, by providing a shared vision of success and bringing the interests of diverse stakeholders into alignment.

Notwithstanding the significant efforts and investment from the municipality to encourage travel by walking, cycling and public transport, the car culture is still a fundamental constraint to implementing the municipality's strategy. The paradigm shift requires a holistic approach,

[1] See McArthur J., Thijs J., 2019, City portrait: Lisbon, annex to D2.1 report on roadspace re-allocation. Organizational, institutional and political dimensions, MORE project, Sciences Po, Paris, 2019, 18p.

one that can consider also the structural problems, while adjusting the governance settings to the municipal vision. For this reason, an overall recalibration of the regulatory framework is recommended in order to make the shift smoother and the municipal strategy more coherent.

3 Background: key challenges and road space interventions

The current context for road space allocation in Lisbon is influenced by the rapid increase in tourism, as well as the city's pro-active stance toward sustainable mobility and shared-mobility technologies.

In the first part of this study[2], the recent growth of tourism in Lisbon was documented. On one hand, this has brought the city significant investment and opportunities for redevelopment. In the centre, infrastructure projects and redevelopment of public spaces have sought to regenerate inner areas. On the other hand, the city's regeneration has provoked some opposition from certain segments of the population. Local debates are often dominated by dilemmas on the most efficient use of public space. To resolve these issues, requires substantial financial, political, organizational and technical capabilities by both the municipality and the stakeholders. This city portrait explores the relations between different actors involved in decision-making for road space allocation, emphasizing the cooperative approach through which the city cope with a complex issue.

3.1 The impact of tourism and urban regeneration

The rapid development of Lisbon in recent years has raised a robust debate over the 'optimal' use of public space. Tourism has brought new financial resources to the Portuguese capital, allowing the city to regenerate while portraying itself externally as a 'global city'. Nonetheless, the city's development has also generated significant challenges for the space as an ecosystem, both in terms of housing affordability and urban mobility.

Whereas the old town is dominated by tourists-related activities and short-stay accommodation, such as Airbnb, property values have grown significantly, contributing to the out-migration of many citizens to peripheral areas. The population in the centre decreased dramatically in recent decades, generating a substantial rift in the population between those who can afford to live in the city-centre and others, who are often forced to move to the suburbs (see Section 4.3). Consequently, more than half of the total share of private cars traveling into the city centre every day comes from the wider metropolitan area. This generates relevant problems of congestion, air quality and liveability in the main accesses, corridors and avenues leading to the city centres :

> *"Lisbon lost a lot of people to the suburbs. The centre is still empty of residents and this created the space for a lot of Airbnb conversions and for*

[2] Ibid.

tourists. Only now we are having a lot of tourists in the centre and this is the problem nowadays." (Interviewee 9)

"We have the city - half a million inhabitants - but everyday more than 1 million coming here from the surroundings areas. We have mass transit to come into the centre." (Interviewee 1)

The municipality of Lisbon is aware of the concerns raised by civil society organizations and pro-actively seeking to address these challenges. To do this, the urban strategy relies on the combined investments in the construction of more affordable developments in the centre aimed at limiting the loss of residents and a new mobility plan seeking to increase livability in the city of Lisbon. At present, sustainability is the municipality's top priority. This is addressed by pushing for a significant change in modal split between cars, walking, cycling and public transport. The goal is to reduce the number of cars in the city centre and substitute these trips with more sustainable modes.

3.2 Urban vision and the SUMP

"We have politicians that have a clear vision of what they want from the city." (Interviewee 1)

While the Municipality's transport strategic vision still needs to be formally accepted by the City council, the current state of political debates showed that main objective by 2030 is to reduce the number of private cars used in the city[3]. More concretely, it seeks to reach a mode share in which two-thirds of the total trips are completed by sustainable modes (walking, cycling or public transport). This represents a substantial reduction in car traffic, as currently 46% of the total trips are made by car. The municipality seeks to reduce this share to 34%, in the next ten years.

This political vision was decided by the city's leaders and especially the mayor of Lisbon, Fernando Medina (Interviews 2 and 3). Nevertheless, a collaborative approach was developed in order to tackle the challenges described in the previous section. A wide range of authorities, municipally-owned companies, private companies, NGOs and experts have been involved, together with other levels of governance, including the national and the metropolitan levels. To date, the primary output of this collaborative approach is a strategy, however an array of more specific measures, including the city's Sustainable Urban Mobility Plan (SUMP) will soon be published.

While the SUMP is not officially formalised, the city's annual budget confirms a high level of resource commitment for this strategy. The expansion of a shared cycle network and the creation of new bikes lanes benefited from a total investment of €22 million (Pinto Miguel, 16/10/2019). Moreover, the budget also has €13.3 million allocated for new pavements in order to make streets more accessible for pedestrians. In addition to support for active modes, the municipality is also investing heavily in public transportation, as it is the main

[3] See the goals published as part of MOVE Lisboa 2030 – the city's Mobility Strategic Vision – and the 2017-2021 Municipal Government Program. For more information on the current policy framework, see the Lisbon city report in Halpern & McArthur (2019).

instrument allowing to achieve the desired charge modal split. The scale of public transport growth to achieve the city's goal is substantial: there were 138 million public transport trips in 2019, and the objective is to reach 148 million by the end of 2020. In order to accomplish this goal, the municipality has obtained direct management of the bus company, Carris. An investment of €33.1 million for 95 new buses will increase the fleet to 693 vehicles. This is a significant allocation of resources in the context that, that, in the post-crisis period, from 2011 to 2018, no increase of buses was possible. Furthermore, the budget allocates money for more parking places for cars will be managed by EMEL. More precisely, 10,000 more in 2020 and a total of 17,685 before the end of this year.

Finally, a key element of the municipality's mobility vision is shared-mobility services, such as bikes, scooters, mopeds and car-sharing services. These are mainly considered as a sustainable mode of transport, that can act as a complement to public transport and help achieve the desired mode shift. In particular, micro-mobility can provide greater flexibility than public transportation and can be combined to increase the reach of public transport services.

3.3 Key 'game-changers' in mobility provision: Monthly pass and micro-mobility services

With the purpose of encouraging a shift away from car travel, the municipality decided to significantly reduce the cost of public transport by introducing a discounted monthly pass. It allows one to ride any public transport inside the city for a monthly fee of €30, or across the metropolitan area for €40. The new policy also offers a family pass, to ensure that entire households can travel freely without paying more than the cost of two individual passes per month, in total. Furthermore, the pass is free from children under 13 and discounted for senior citizens.

The introduction of this monthly ticket is considered by many interviewees as the first mobility 'game-changer'. The effects of this policy will take several years to become visible in some years. However, the monthly pass represents a strong incentive for individuals and families to reduce their dependence on private cars in their daily activities, such as commuting to work or taking children to and from school. The second game-changer is the city's pro-active approach to encouraging shared mobility services[4]. Alongside the municipally-owned bike-sharing services, Gira, various private companies offer a range of transport modes, from semi-active modes such as bikes and scooters, to motorised vehicles including mopeds and cars. These modes are usually described as 'optimal' in the sense that they provide point-to-point travel and are powered by electricity.

Findings from the press review[5] and the interviews underlined the three following impacts of these new actors on decision-making. First, shared mobility services do not have a designated lane, so they either use the street - provoking the complains of the car users - or

[4] Further information in Section 5.1

[5] See the reference section and for further details on the press review, see the cross-findings report in this deliverable.

the sidewalks, disturbing the safety of the pedestrians. The data collected show how there has been a lot of attention on shared mobility in local debates, both in traditional news media and social networks, with a specific focus on the use of a helmet[6]. Second, shared mobility services usually use a free-floating fleet of vehicles, thus, there are no dedicated parking spaces. This led to conflict with pedestrian groups and also the municipal police, who are responsible for enforcing the road rules. Third, there is very limited evidence for the impact of shared mobility on modal split, and so their impact on the mobility system is unknown, creating ambiguity over how they should be regulated. Finally, the flexibility of the market means that there is uncertainty over the longevity of these companies in any city.

For these reasons, the municipality chose to formalise the role of shared mobility operators in mobility provision by creating a memorandum of understanding[7].

4 Motivations for contestation

In this section, we seek to explore the major motivations for contestation. Our understanding of the notion is broad enough to encompass the various coalitions established in order to face a contested issue such as road space allocation. Based on interviews with a range of stakeholders and state actors, two dominant themes emerged as the primary motivations for challenging the way that road space allocation related decisions are made in Lisbon. The first is the contestation generated by challenge of reducing the use of cars; the second relates to debates over increased inequalities as a result of regeneration in the city.

4.1 The continued influence of Lisbon's car culture

The municipality's bold strategy to reduce car traffic and encourage a shift to other modes resulted in resistance from some local residents. According to stakeholders interviewed, the vision for Lisbon resulted in contestation because it requires a concrete change in behaviour, attitudes and lifestyle from residents. Many of those living in residential areas of the centre are experiencing rapid change as housing is redeveloped for tourism. In addition to this change, the new strategy also requires residents to use their cars less.

Achieving the city's vision is not a straightforward process considering that the car in Lisbon played a crucial role in the development of the Portuguese society. In the 1980s the introduction of private cars played an important societal role in allowing working class populations to live a different lifestyle and exercise their freedom:

> *"You have really a working class building up trying to become middle class, and the first thing was buying a car. That would have represented freedom, empowerment with your peers." (Interviewee 8)*

[6] Further discussion in Sections 4.1 and 5.3

[7] Further discussion in Section 5.1.

Urban planning has supported the use of private vehicles for many years. Thus, the public response to the current mobility goals is not surprising: car users are the strongest opponents to the new goals, and it has generated a lot of public debate in the last year.

As mentioned above, the introduction of new micro-mobility have brought into the city also raised a debate over who has ownership and the right to use the street. In August 2019, in response to measures to increase micro-mobility and active travel, and reduce the use of private vehicles, the Portugal Car Club (ACP) launched a campaign to make it mandatory for cyclists and shared-scooter users to wear a helmet. This campaign captured a lot of media attention and was supported by both the national Road Safety Agency and the municipal police. However, it was opposed by the cyclists' associations, who countered that the helmet issue is merely a distraction. They argued that there are not sufficient data to show that wearing helmets could reduce the number of accidents or the users' safety. Cyclists' associations and the shared-mobility operators were supported by local authorities, so wearing a helmet is not mandatory for cyclists and shared mobility users. Nonetheless, this example of opposing views and counter-claims illustrates how stakeholders often seek to form coalitions in support of, or against, particular modes or travel activities. Moreover, the campaign shows how the car culture in Lisbon is still an obstacle when it comes to implementing the municipality's goals.

> *"So, the last 15 years the majority of Lisbon citizens - and not only Lisbon as a city but also Lisbon as district - they are used to go around with their car, anyplace, some also trying to go to the bathroom with their car…To do 500 meters, 5 km or 20 km, the car is always the solution even to place where you know it is going to be very difficult to park. Lisbon have developed in the last 20-25 years a lot of barriers for parking because it was a mess." (Interviewee 4)*

Finally, there is a significant discrepancy between urban planning and the regulation of transport. While urban planning has seen a substantial change, regulations are still relatively car-oriented. For example, there are still minimum parking requirements for new housing developments.

> *"They want to reduce the number of cars entering into the cities. This is the main political target of this executive, and at the same time they are still requiring in any case that you have a building that need to be refurbished, you have to have one parking place for each typology of houses. That is a big contradiction. They could study it case by case, whether it is required or not, depending on the local of the building, if it has a good accessibility like public transportation, cycling network and so on, and if you have a good parking control management, then why you should force a building to have parking places?" (Interviewee 8)*

More precisely, minimum parking requirements were introduced in the city's Masterplan, and vary according to the area and the apartment typology with a minimum of 0,70 parking

places for each 2-rooms apartment[8]. Parking spaces in Lisbon are relatively inexpensive, in comparison to many other European capitals, and few parishes have established a system to control the access and speed of cars. Overall, the lack of coherence between the regulatory framework and the municipal goals can undermine efforts to reduce car use. The next paragraph emphasizes the contradiction between the pre-existing regulatory framework and the paradigm shift, showing how it can constrain the municipality's goals.

4.2 From planning to practice

Stakeholders interviewed for this study argued that the car-oriented regulatory framework jeopardises the ability of planners to develop flexible and innovative solutions to reduce the presence of cars in Lisbon. While the reallocation of space aims at shifting users' behaviour, the solutions proposed cannot fully address the existing problems. Moreover, the regulatory framework has not recalibrated to effectively implement the paradigm shift that would require more flexible solutions. To illustrate an example, one may mention the ongoing contestation over parking places:

> *"One of the things that me personally have said ..., 'please we have to relax these constraints'...and the technicians said 'no, we are not those who are going to solve the problem when the cars will be parked irregularly, on the sidewalk and so on'. So, 'first, you restrict the intake of car and then we do'... It is a chicken and egg thing [...] So other aspects [regulations] have to be solved to make the solutions more creative and flexible." (Interviewee 7)*

Reducing the number of parking places for cars is one of the main debates in Lisbon. The problem is that, as well explained by the fragment above, it is not only a technical issue since the reduction of parking in one area can generate political side-effects or merely move the problem in another. According to the stakeholders interviewed, the municipality's goals cannot be achieved without a cross-cutting approach that can also change the pre-existing regulatory framework. Notwithstanding, the continued influence of the car culture manifests itself in political debates, with respect to changing regulations. The dilemma becomes evident in the following passage:

> *"When you want to do something very difficult then you have a problem, and then it goes to the political problem. You have to justify why the regulations should be overcome and for that you go to the municipal council, the local parliament, where decisions need to be voted and that depends on the balance of the political parties that are there. So, you do not have issues if you comply with the masterplan, but if it does not have those solutions than things are more complicated [....] The big challenge of the municipality now, is to make the regulations a bit less restrictive." (Interviewee 7)*

[8] Annex X to the Regulamento do Plano diretor municipal de Lisboa, p.337. This plan was adopted in 2012 with some subsequent adjustments. It is accessible accessible online : http://www.cm-lisboa.pt/viver/urbanismo/planeamento-urbano/plano-diretor-municipal

To conclude this section, the changes in urban planning in Lisbon are the main source of contestation to-date. Therefore, we found a cultural resistance to the behavioural shift imposed by the municipality, and also a tangible contradiction between the masterplan and the existing regulatory framework. While the cultural resistance is attributed to the societal value of the car, the regulatory settings are a more entrenched impact of the car culture. Inevitably, a paradigm shift is required to adjust these settings. Nonetheless, we showed how in Lisbon this process is not straightforward because it implies significant political obstacles. The following section follow this same line of argumentation, while focusing on the contestations provoked by the regeneration of the built environment.

4.3 Urban regeneration and impacts on inequalities

The second motivation for contestation relates to the ongoing regeneration of the built environment in Lisbon, that has provoked some opposition from citizens. As discussed earlier, the price of rents in the city centre increased substantially in recent years, with impacts on inequalities and out-migration of some residents to peripheral areas. Spatial inequalities are also evident in the mobility patterns and lifestyles of the Lisbon residents, and the discrepancy between the centre and the suburbs. Moreover, the regular flows of people from the metropolitan area into the centre puts a lot of pressure on the city's mobility system, and generated a high level of congestion in the main corridors (see 3.1).

Besides the rise of spatial inequalities, stakeholders highlighted the loss of cultural authenticity in the city centre. Many contests the fact that the city of Lisbon has been transformed into a 'boutique city' or the 'city where Madonna would live'. Ideas about the loss of the city's authentic character in the downtown, are widespread opinions that cut across the civil society and the citizens of Lisbon, independent from their mobility needs or travel habits. Those who have observed this rapid city change argue for more balance between redevelopment and the preservation of Lisbon's cultural traits.

The reason for this tension should be found in the way in which the city of Lisbon is seeking to portray its identity externally, and also to its own residents. In taking a pro-active stance on shared mobility services, Lisbon is seen as a 'global city' (see Section 5.4) and a leader in mobility and open data (see Sections 5.1, 5.2). Promotion of tourism and relaxed investment regulations have made the city attractive to foreigners, as a place to visit or invest in, and significantly increased Lisbon's profile internationally. This also minimised the extent contestations that tend to arise during periods of rapid change, because the city's identity provided a cohesive, shared understanding of the purpose and goals of policy measures. However, stakeholders expressed their dissatisfaction with the impacts of Lisbon's brand on the city, because they feel that it compromises the city's identity and inclusiveness:

> *"The branding of the city is the principal responsible for the gentrification problem, there is no doubt about it." (Interviewee 7)*

Overall, most contestation has been found in the city besides the one of the car users (see 4.1). Nonetheless, it holds true that the process of modernization of the city is provoking the concerns of many who despite approving the political directions are critical with the way in which the change is pushed.

5 Participation in decision-making processes and public deliberation

This section investigates the socio-political space for stakeholder engagement and deliberations. We explore how contestation, and more generally deliberation, occurs in the city of Lisbon.

The first section analyses the participatory approach established by the municipality, and the venues through which the various actors are seeking to push their own political agendas. The following section review how digitalisation and data sharing contribute knowledge and evidence for decision making. The third section focuses on social platforms where opposing views on road space allocation are mobilised and debated. Finally, the city branding is explored further as a way of establishing expert views and legitimising road space allocation schemes.

5.1 Participatory approach to mobility planning

Lisbon municipality takes a participatory approach to engaging stakeholders and other authorities. This approach is used for both horizontal and vertical governance arrangements. With regard to the relations with the national level, the municipality and government are closely aligned. With the former mayor of Lisbon as the Prime Minister, and a former government minister as the current mayor, there is a shared understanding and networks between the different levels of government. In July 2019 the national parliament approved the Estratégia Nacional para a Mobilidade Ativa Ciclável (ENMAC) 2020-2030, a large investment in cycling networks accompanied by a political road map aimed at increasing the use of bikes in Portugal.

For the metropolitan area, there is substantial discussion and cooperation on mobility, although individual municipalities have autonomy over their own policies. EU directives mean that metropolitan public transports are likely to become more integrated, and new public tenders are planned to launch in the near future. The discussion is still ongoing, however, the vision of the mayor is to establish a more formalised and integrated framework for transport planning and provision. Since different political authorities are in alignment, the vertical dimension of governance in Lisbon does not experience a lot of contestation between actors.

Similarly for the horizontal level, there is strong co-ordination between actors, particularly between the municipality and the municipal police. There are also well established networks with civil society and the university:

The university has been involved in many studies and partnerships to develop projects and to study public transportation' users. From the municipal perspective, this collaboration is also essential in order to acquire knowledge and data related to planning and micro mobility (see Section 5.2). To illustrate an example, ‘CMLActive’ is a consultancy project that will run for the next two years together with the department of civil engineering of the University of Lisbon.

Second, the municipality collaborate with their own subsidiary companies, including the parking company Empresa Municipal de Mobilidade e Estacionamento de Lisboa (EMEL) and bikesharing subsidiary Gira. EMEL is an essential partner for decision-making related to parking regulations, while Gira is the municipal bike-sharing service, owned by EMEL. Whether it can be complex to get data from private entities, the municipal ownership of these companies gives the city a possibility to acquire ready-made data to be consulted whenever it is politically and technically necessary (see Section 5.2).

Another key network is the cooperation between the municipality and shared-mobility operators. The municipality meets with around thirteen companies on a monthly basis, as well as organising thematic meeting with, respectively, the scooters or bikes sharing operators, and the companies offering moped or car sharing services. During these consultations the municipality has the occasion to discuss about many practical issues and operational problems - such as parking regulations - while also hearing the requests coming from these companies in a semi-formalised arena for lobbying and advocacy:

The memorandum of understanding implies that private companies respect the rules set by the municipal police and the municipality itself. These rules require the companies to favour environmentally-sustainable solutions, deployed in specific areas permitted for shared-mobility, and to share data with the municipality. This special working relationship with shared-mobility private companies was established in response to the initial challenges in managing new forms of mobility on Lisbon's roads and streets[9].

Within this consultation space, mobility providers also expressed their views on how road space allocation needed to change, not only for their own business but the city's mobility more broadly:

> *"We feel that there are some streets, avenues and areas where the municipality needs to do some restriction to the use of private cars because if there are not restrictions customers will continue to use their private car and we do not want to have advantage to our business. What we want is to put in place that shared vehicles, either shared cars, bikes or scooters, is much more used then a private car. So, at the end is better for the city mobility." (Interviewee 4)*

The collaboration the municipality with the private companies is more organised and structured than that with other public stakeholders, such as cyclists or pedestrians NGOs. Again, this due to the fact that the City Hall perceived the shared-mobility services as a game-changer in the context of Lisbon, one that had to be regulated in a more formalised way. The collaborative approach - bringing together a vast network of experts, stakeholders and authorities - is also aimed at minimising contestation and acquiring data.

The next section will focus on how the municipality of Lisbon pursues an evidence-based activity of policymaking. In this particular case, deliberation is strongly influenced by the

[9] See Section 3.3

collaborative establishment of expert knowledge through data, evidence and stakeholder perspectives. The use of digital tools and open data are central to this approach.

5.2 Digitalisation and 'politics of open data'

A strong vision, such as the one adopted by Lisbon's Municipality, requires evidence and innovative tools to translate ambitious goals into specific measures or interventions. Lisbon draws heavily on expert knowledge to justify and support its strategy, including data collected and disseminated by a range of actors. Data are also perceived as a crucial element of the municipal communication strategy (see Section 4.3).

In this process, digitalisation plays a key role since it gives access to a large volume of high-resolution data by using directly users' telephone as a mode of collection:

> *"The SUMP will be based essentially on that data we collected automatically. [Moreover] from time to time – 5 years – we can make a bigger collection of data based on the manual. We have a lot of inputs from this data and from automatic systems" (Interviewee 1)*

To collect new data, innovative technological tools will be employed in the future. For instance, through the use of drones, a video recording will make possible the collection of data on pedestrians; the identification of the main stopping points as well as the monitoring of the proper use of public transportation. This will complement the collection made through more traditional tools, such as survey processes and on-site identification.

More generally, the attention to data and focus on evidence-based decision-making process is embodied in the municipality's approach to open data. An online platform will soon be available so that any citizen can freely access all available data about the city's mobility system. Anyone could potentially support the municipality's data collection efforts in the future. This approach aims both at engaging with stakeholders, and at informing citizen and communicating with them about this deliberative process.

The inclusion of civil society actors in data collection also shows how higher quality and variety of data is required by the municipality to meet their goals, similar to many cities pursuing strategies to reduce the use of cars. Indeed, the lack of data - especially data to show the impact of shared mobility on other modes - is perceived as a crucial problem that needs to be addressed with external collaboration. In this way, there is also demand for collaboration with a wide range of actors, such as universities and the shared-mobility operators (see Section 5.1).

Since the mobility providers themselves have reasonable uncertainty about how mobility technologies will evolve in the future, there is a experimental approach in place to leverage open data and build collaborations to manage this uncertainty:

> *"We started with the idea of changing the paradigms of mobility here because when we started there was no sharing means of transportation in Lisbon. It was something quite innovative." (Interviewee 6)*

> *"We do not know now what is going to be the future, but we know the trend. We are investing already in a way that we will be placed, to at least not*

being out of the business. All these mobility solutions and all the investments that we are doing in infrastructures or vehicles with these tests that we already done with partners, again, we do understand that to be part of the change we cannot stay alone. That is why we belong to these organizations and we do a lot of partnerships. Change is difficult and if we think that, we will do the change by our own at the end we will be out." (Interviewee 5)

5.3 Use of social media for public debate and awareness

Many of the stakeholders interviewed emphasised how the communication to the public and stakeholders is not only for managerial reasons, but "*mainly to push the debate on mobility*" (Interviewee 4). Traditional media and social networks play a key role in Lisbon, to share data, communicate results and information about new infrastructure projects and regulation, or to educate people on the use of new technologies. The news media are the main arena for debates and opposition about mobility planning or transport. In this sense, there is greater involvement of both politicians, NGOs and companies in newspapers and social media networks to ensure their positions are represented and promoted on these platforms. The municipality, in particular, is aware that nowadays it is necessary to assist the political vision with a strong apparatus of communication:

"They are very present in the media, they did a lot of interviews they are always available to talk, they do that in a simple way. They have been really factual, they have not been promised to much that they cannot comply with, they are careful, which is wise politically. But they are facing some opposition from certain segments of the population." (Interviewee 7)

As recalled by the quotation above, however, the municipal communication strategy, while seeking to promote the municipality's goals, may occasionally raise sensitive issues and create a counter-productive effect. For instance, with regard to the controversies over shared mobility (see Section 3.3), stakeholders discussed the role of active social media pages where a large number of complaints are posted daily. This issue displays the problem of communicating on platforms where there is a gap between reality and the virtual world created online. In particular, platforms can allow users to post a substantial amount of support or critique for a specific transport mode or activity, without fact-checking or moderation.

Particularly for social networks, almost all stakeholders shared information on platforms including websites, blogs, webinars Facebook, Twitter and Instagram. While the majority of stakeholders viewed social media as a valuable opportunity to communicate to a vast audience in a short time frame, some critiqued the negative repercussions of social media for robust public debate. From a civil society perspective, for instance, new media have influenced citizen participation. According to these stakeholders, a sort of 'click activism' has substituted the old-fashioned way of contesting through protests or demonstrations in the street, as well as the inner organization of the associations. In particular, Skype meetings would jeopardise the physical engagement of activists and the planning of activities, resulting in a substantial loss of identity and cohesion within these organizations, which stopped implementing a variety of actions, such as strategic urbanism, that were previously present in Lisbon.

5.4 The vision and the city branding

Another tool used by the municipality to mobilise expertise for policy is city branding. This term refers to the strategic promotion of the city's image, relying on the attachment of emotional and symbolic values to policies and strategies. The vision of the municipality, in this sense, push the brand of Lisbon as a 'sustainable and global city'. For the current transformation that Lisbon is experiencing, the city brand offers a way of justifying policies that are contested by some groups of the population. This is constructed to provide political guidance on the specific measures contained in the SUMP (see Section 2.2). In a way, this brand creates a coherent framework between the identification and perception of problems, and the opportunity to propose solutions.

Moreover, in Lisbon we observed a multifunctional role for the city brand. It is a key instrument not only to legitimize policies, but also to portray the city internally and externally. In other words, the Lisbon brand is useful to attract foreign investors and tourists; while also binding actors within the governance network to a shared vision in order to reduce contestation. The city branding produces and reproduces the regeneration process (discussed in chapter 2.1), as it is the instrument to continue attracting tourists, financial resources, and socio-cultural capital into the city. Moreover, it is useful for the city to communicate through different forms of media, by using visual, direct, emotion and slogans. Second, the 'global city' brand is also used to minimise internal contestation. The municipality aims at binding many players in the arena to a shared vision for the city. This vision is framed as the way to develop Lisbon into a modern, livable and sustainable city. This brand motivates actors to give support to the municipal project and create new alliances.

6 Conclusions

Lisbon represents a clear example of how road space allocation can become a political process through the opposing views and agendas of different actors. Specific points of contestation are often underpinned by more fundamental societal questions about the distributional impacts of road space reallocation, or public expectations about their right to use road space for particular activities, or travel modes.

6.1 The importance of 'the political' in allocating road space

In this context, Lisbon's city-brand can be understood as a 'political project' to bring stakeholders into alignment, as well as setting specific goals or ambitions for the city. In this way, reducing car traffic must be achieved through some political work, as well as technical interventions to reallocate road space and upgrade infrastructures or regulations. For this reason, a strong vision was established before developing specific strategies or technical interventions, such as the SUMP. Likewise, monthly meetings with the shared-mobility operators and the collaboration with the university to acquire new data are useful in political terms, to empower the municipality's goals. The inclusive approach to engage with stakeholders supports better political legitimation from various groups in society, and prevent opposition later in the decision making process.

Similarly, while municipal one has been discussed as an evidence-based process of decision making, we also found that the use and the production of knowledge in Lisbon is instrumental to the political end. Lack of data, such as those on the impacts of micro-mobility, is perceived as a problematic issue, possibly jeopardizing the strength of the vision itself. From here, it is possible to grasp the search for new channels to collect data as well as the 'politics of open data'.

6.2 Strategic challenges and opportunities for road space reallocation

In order to enable and encourage behavioural change with regard to the use of cars, the existing legacy of the car culture, remains a challenge. Complementing current regulations to improve the quality and affordability of public transport with additional measures that limit the availability of parking can help to support this transition. As mentioned in this report, the continuation of minimum parking requirements for new developments could continue to encourage people to own their own cars while living in the city.

Stakeholders' critiques of city's redevelopment and the impacts on inequality could be better integrated into decision making for road space allocation. At present, mobility and transport planning is affected by out-migration of urban residents to peripheral areas, and the subsequent commuting traffic into the centre of Lisbon. Expanding discussions of mobility planning to include these stakeholders' views could allow more integrated planning for housing and development. This can create the opportunity to resolve challenges with mobility and housing affordability that are more sensitive to the unintended impacts on spatial inequality.

Finally, with regard to the increasing of cycle modal share, behavioural change could be further supported by studying the barriers and triggers (both individual and external) influencing transport mode choice. Echoing the suggestions of Felix Moura and Clifton (2019), interventions should be tailored around those people who are willing to cycle. Collecting high-resolution data about behavioural change over time aligns with the municipal strategy of 'open data politics', and is also defined by scholars as *'a priority when attempting to increase cycling modal shares'* (ibid., p.11).

7 Interviews

Number	Type	Interview type	Date of interview	Members of team present
Interviewee 1	Government stakeholder	Face to face	09/11/2019	C. Halpern, A. Artigas
Interviewee 2	Government stakeholder	Face to face	09/11/2019	C. Halpern, A. Artigas
Interviewee 3	Government stakeholder	Face to face	09/11/2019	C. Halpern, A. Artigas
Interviewee 4	Private sector stakeholder	Face to face	11/10/2019	F. Sarti
Interviewee 5	Private sector stakeholder	Face to face	11/10/2019	F. Sarti
Interviewee 6	Private sector stakeholder	Face to Face	11/10/2019	F. Sarti
Interviewee 7	Researcher	Skype	19/11/2019	F. Sarti
Interviewee 8	NGO	Face to face	09/10/2019	C. Halpern, F. Sarti
Interviewee 9	NGO	Face to face	09/11/2019	C. Halpern
Interviewee 10	Researcher	Face to face	11/11/2019	C. Halpern
Interviewee 11	Researcher	Face to face	11/11/2019	C. Halpern
Interviewee 12	Students Association	Skype	28/11/2019	F. Sarti

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MORE
Multimodal Optimisation of Roadspace in Europe

City portrait: Malmö

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

Version:	**3**
Prepared by:	**Jenny McArthur (UCL), Francesco Sarti (Sciences Po)**
Checked by:	**Charlotte Halpern (Sciences Po)**
Verified by:	**City of Malmö**
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Table of Contents

1 Executive summary

Streets are contested spaces, as different actors and stakeholders hold differing views on how space should be allocated across different transport modes and non-transport activities. Based on interviews with a range of stakeholders and non-government actors, this report examines the claims that are made regarding the allocation and use of road space. It also explores the ways in which different stakeholders mobilise their claims, to government actors or within the broader public sphere. It complements the work done on organizational, institutional and political dimensions of road space reallocation[1].

2 Introduction

Malmö is renowned internationally for its progressive approach to urban sustainability and has one of the highest cycling rates in Europe. Over recent decades the city has invested substantially into cycling infrastructure and public transport, however, the municipality has further plans to improve road space allocation for sustainable modes such as walking, cycling and public transport. Despite the relatively high level of travel using these modes, there is nonetheless contestation of schemes that aim to reduce road space for cars. Interviewees noted that interventions to support sustainable modes increased road space and accessibility, but often this is not accompanied by measures to reduce space for cars. This reflects a strong car culture, where there is public resistance to changes in road space allocation that are seen as detrimental to private cars. This culture has been partially incorporated into the political agendas of some parties, which seek to promote or protect the interests of drivers.

A variety of actors, including NGOs and elected officials, seek to influence decision-making through direct advocacy to the authorities, as well as more indirect forms of influence such as public engagement and awareness, campaigning and mobilisations. Fridays for Future and Climate Strike are prominent new movements, building substantial public support for climate action, which requires stronger actions to improve sustainable mobility. Another key activity that influences road space allocation in Malmö is property development, since the city has several prominent eco-districts that are completed or under construction. These developments aim to support low-carbon lifestyles and alternative transport modes, however the experiences so far show that this can be difficult to achieve. Negotiations between

[1] See McArthur J., Thijs J., 2019, City portrait: Malmö, annex to D2.1 report on roadspace re-allocation. Organizational, institutional and political dimensions, MORE project, Sciences Po, Paris, 2019, 16p.

property developers and the municipality are important to determine road space allocation in these areas.

Going forward, road space allocation in Malmö will be shaped by the ongoing development of eco-districts and negotiations between local authorities and property developers, as well as the emerging climate action movements and their ability to mobilise support for specific road space interventions that support sustainable mobility.

3 Background: key challenges and road space interventions

3.1 Overview of the development of planning in Malmö

This section provides an overview of the major historical planning developments in Malmö. This history demonstrates how Malmö achieved significant transformation from an industrial city to the current knowledge-based economy, with a strong focus on progressive sustainability policies. Indeed, Malmö aims to become the first city in Europe with 100% renewable energy by 2030. The transition to renewable energy appears feasible at the present time, since there is political support for this from the municipality.

Malmö has an important heritage, as a working-class industrial city. The city's economy was formerly based on extraction and manufacturing sectors. In particular, the western part of the city was once dominated by fabrics and industries, however they lost much of their original capacity over time, particularly during the 1980s. This gave the municipality the opportunity to simultaneously shift from industrial development to become a leader in sustainable development, with efforts to rebrand the city as the economic base shifted.

Across the past two decades, four key interventions have shaped road space allocation in different parts of the city. First, the 100% renewable energy eco-district - Bo01- located in the former industrial area in the western harbor. This project was a forerunner to the Hyllie redevelopment. It remains a significant example of modern urban planning embodying innovative solutions, such as energy efficiency, open storm-water management and green roofs. Reducing car travel was a key focus of the eco-district, although after construction it was necessary to build additional parking to allow residents to store their cars. Second, the Oresund Bridge, connecting Malmö with Copenhagen. This prominent project allowed Malmö to become the Swedish ‘gateway to Europe’. In doing so, it also served the socio-economic development of the entire regional area and the establishment of a collaboration between the city of Copenhagen, Lund and Malmö. Based on the literature (Thornley & Newman, 1996), the construction of the Oresund in 1993 has been also highly politically contested both at the local and national level. Third, the new university was inaugurated in 1998 and nowadays bringing into Malmö a great number of international students, together with socio-economic capital. Finally, the most contested and, at the same time, internationally prominent urban project, the redevelopment of the district of Hyllie. It includes the construction of a railway station, two towers, an ice hockey rink, a shopping mall and 7,000 dwellings. The aim is

bringing into the city new investors and wealthy immigrants, contributing to the economic transition of Malmö.

The motivations for contesting urban development in Malmö will be more precisely discussed in this report. Nonetheless, this review shows that the debate over Malmö's identity and trajectory of development is ongoing, and part of a larger historical story.

3.2 Current interventions

The figures below illustrate the municipal vision for the redevelopment of Nyhamnen, which is ongoing and according to the plans should be completed in 2040.

Figure 1: Municipal vision for the redevelopment of Nyhamnen (Source: The municipality of Malmö)

This neighbourhood has a long history of commerce and delivery that - together with the migration movements toward America in the 20th century - has shaped its identity to date.

Nyhamnen is currently an industrial area located between the central station and the western border of the city. The city-plan aims at transforming it in a strategic eco-district with benefits for the entire city of Malmö. Not only Nyhamnen will become a business and leisure area - contributing to the economic growth of the city - but also a strategic area from a connectivity perspective. This neighbourhood will give access to the sea providing alongside the opportunity to expand the city, while bringing together the western to the eastern parts of Malmö. As it is possible to observe from Figure 1 above, the project involves the reconstruction of the building environment, including new housing, bridges and islands. In so doing, sustainability and livability concerns will be considered, in line with the traditional planning model of the city of Malmö (see section 3.1). Not only many green areas are included in the municipal project.

Also, through intelligent planning, proximity to PT and encouragement of active or semi-active modes of transport, Nyhamnen is supposed to become a modern and sustainable neighbourhood. One that will also include shopping areas, day-care services, schools and sport facilities. In this scenario, the reallocation of the mobility system is one of the most crucial and challenging aspects of the project. The City Hall is planning to establish a dense cycling network, covering all the surface of the district while being complementary to the PT and micro mobility solutions. On the contrary, the use of cars will be constrained: no long-term parking places were planned in the surface, only some short-term and reduced mobility (PMR) parking places in those areas where a high level of accessibility is needed.

Moreover, the neighbourhood could be connected easily with a fast train - due to the proximity with the central station - and through a new metro line that could potentially trigger the development of the entire regional area. In this regard, discussion with the city of Copenhagen are ongoing. Finally, pedestrian areas will dominate the shopping and recreational areas, as depicted in Figure 2 below.

Figure 2: Hällplats i Michelsensgatan (vision picture: Arkitema). (Source: The municipality of Malmö).

4 Motivations for contestation

Three dominant themes emerged from interviews with a range of stakeholders and state actors as the primary motivations for challenging the way that road space allocation decisions are made in Malmö.

4.1 Car culture and reluctance to reduce space for cars

The first reason given by interviewees was that road space allocation tended to expand space for sustainable modes (walking, cycling, public transport), but there was limited action to reduce space for cars. As a result, the intended change in travel behaviour from car travel to sustainable modes was limited, because car traffic was accommodated. Additionally, motorcycles and moped were not explicitly included in local strategies, and so they were not directly supported as a more efficient travel mode:

> *"I would say, there is a very strong car domination - in traffic planning… I still see there is a congestion of cars when I go by bus, and this develops everywhere, and still we are more and more people and more and more buses and trains, but still the travel by car is increasing." (Interviewee 6)*

> *"One major problem is that motorcycles, mopeds and other two wheelers are not in any transport family. Out of 290 local authorities, no one has a safety strategy including motorcycles and mopeds. And when the Swedish government gives money to the cities to improve sustainability and mobility, they do it to improve for public transport, bicycles and pedestrians - at the same time, our safety is decreasing. we are getting into smaller space, trying to fight with lorries and buses, and nothing at all is done for motorcycles and mopeds. Not in Malmo, nor any other city." (Interviewee 7)*

While some groups advocated for bold measures to remove cars completely from certain areas, they faced significant resistance:

> *"There are some groups, one works with car-free urban districts, there is one arena where they meet and discuss, and they actually want to close off the whole inner city for car traffic, but that's not likely to happen." (Interviewee 8)*

The fact that space is rarely reduced for cars was attributed to the dominant 'car culture', the preference for travelling by car and expectation that transport infrastructure could not limit space for cars, particularly to accommodate other modes. Some interviewees recounted the longer history of this culture, which is reinforced in the present day:

> *"In my experience, [the car culture] one of the most critical issues, especially in politics, cycling in politics in Sweden at least, has been for some decades now, an issue that all parties agree upon" (Interviewee 5)*

> *"There are generational issues in politicians; it was easier when we had so much road space for cars, it's always the car space that is threatened when we redo something, they get sick of it… in Malmo we build a lot of speed limitations into streets, put down the tempo in the street, makes it possible to connect the buildings, make it possible for people to cross the streets every 100m, as in other cities." (Interviewee 1)*

4.2 Parking

The second dominant theme related to car parking, and the resistance to reducing space for cars. This included the imperative to provide a lot of parking in new developments, to support travelling to and from places by car.

> *"There's nothing, no measures against the car traffic, like saying ok we'll close off these streets or decrease parking and things like that. I think this is one of the biggest issues, we're afraid of doing things against the car. We're not afraid of doing lots for sustainable transport, nobody is against this, but in terms of taking space for the car, decreasing parking, whatever, it's kind of like - no, we cannot do that." (Interviewee 8)*

Newer schemes show the continuation of this car-centric approach with developments such as Hyllie station and the adjacent shopping centre. Despite the location of the development around a new transit station, the design and allocation of road space prioritised motor vehicles, and created significant barriers to walking or cycling:

> *"With Hyllie, they built this external, huge shopping centre. I think it's the biggest shopping center in Scandinavia, Emporia, and there is lots of car parking, despite the fact it is next to a new station. It's almost impossible to bike to Hyllie, it's cut off by highways, so it's really - that's one of the worst planning examples... 60's kind of approach." (Interviewee 8)*

Parking considerations were also influenced by shop owners and commercial actors, who were concerned that a lack of car parking would impact on their business, as customers would go elsewhere to retail locations that allowed them to travel by car:

> *"It's linked to big malls outside the cities, which is a big problem. One of the things they often say is that we can't leave the cars out, because then people won't come... even if we say that there are other modes, the shop owners say, we need to have the cars here. Because the cars have access to malls. They are probably right about the competition [with other commercial areas], shoppers will come to the place where they have a car park." (Interviewee 9)*

4.3 Increase in opposition to cycling

Interviewees emphasised that, despite the well developed cycling network and relatively high ridership in Malmö, opposition to cycling in particular was evident. This arose from the realisation that cars were beginning to slow down because a part of the road space was allocated to other modes:

> *"Cities are investing and starting to build, to actually prioritise cycling locally, and I think people are seeing this and becoming increasingly frustrated in their cars. They feel like they are coming in second, and they question - why put so much space for cyclists when it reduces the road space, producing congestion." (Interviewee 5)*

> *"There are people who definitely think that there are too many cyclists, and who think that it's too much to have to park your car... and there are all these shop owners who don't want pedestrians streets because they think they will lose the customers." (Interviewee 6)*

Part of the opposition to cycling related to their behaviour, or perceived right to use road space:

> *"I think we're seeing debates at all levels, we're seeing debates in the local newspapers, on social media, as soon as there is some article about cycling, there are always angry comments saying that cyclists don't deserve to be funded, or whatever the arguments are." (Interviewee 6)*

> *"In Malmo and Lund, many people think that cyclists are not obeying the rules, so that is also in the media a lot… The debate is driven by the media, here it is very public." (Interviewee 9)*

It was also noted that, despite announcements that sustainable mobility was a priority at the national level, often this was not reflected in the budget allocations given to cycling.

> *"Sweden at least, has been for some decades now, an issue that all parties agree upon - all want to increase cycling and make it safer, according to what they say, but if we look at the figures and what they are actually doing, it's quite the opposite… they are saying that they want to*

increase cycling, but only spending 1% of the national funding on cycling infrastructure" (Interviewee 5)

5 Participation in decision-making processes and public deliberation

The second part of the analysis evaluated how NGOs and other stakeholders participated in decision-making and related activities that influence mobility planning in Malmö. This includes public education and raising awareness about mobility issues, direct advocacy to the authorities, or collaboration with other actors to campaign for change. The interviews showed that there are a number of well-organised groups and networks advocating for specific travel modes, such as cycling, motorcycling and walking.

The groups identified were actively engaged with the local and national authorities, to lobby for specific changes to legislation and local planning decisions:

> *"We advocate planning legislations, so for example if there is a possibility to have a sign saying, cycling street, which doesn't exist in Swedish legislation, and also the ability to have bidirectional bicycle traffic on unidirectional streets within cities… we also lobby for national investment in cycling infrastructure" (Interviewee 5)*

> *"We organise meetings for planners and politicians to exchange ideas on challenges within their fields, to share knowledge" (Interviewee 5)*

Three key themes emerged from interviews, that shaped how external actors could participate in decision making. First, the growing resistance of specific political movements to sustainable mobility. Second, the specific approach to property development in Malmö to develop eco-districts in former industrial areas. Third, the youth movement for climate change.

5.1 Political parties and opposition against sustainable mobility

Interviewees noted the growing political opposition to sustainable mobility, and cycling in particular, in recent years. This was evident through local elected officials as well as political movements that adopted an explicit stance against certain transport modes:

> *"It's a complex issue, we have all the right wing parties, they are not so much for change. But that's usually - the Social Democrats, environmental party, left wing party, they are much more for everything that is for the environment. And we have the centre party in Sweden, they claim that they are for the environment. So they have this environmental focus, but at the same time, as they say in the campaigns, we chase emissions not car drivers. So if you don't want to get rid of the car, get rid of the emissions - so that's, and of course, the Swedish Democrats, they have an image of traffic that is kinda from the 50s, basically. We want to go everywhere with*

the car, and lots of parking, they block everything if they can. So they are very strict on that." (Interviewee 8)

For Malmö, local elected officials also had some influence, which could at times oppose the initial plans produced for road space reallocation:

"In Malmö it's more politics - the planners are very progressive, they want to do lots, and it's actually the case for councils in most major cities in Sweden. The planners want to do more, but the politicians... I think that's one of the biggest issues." (Interviewee 8)

"Malmo has issues with traffic congestion in the morning and evening, that makes the politics - lots of complaints about traffic issues, they react like this - just add more - how to solve it?" (Interviewee 2)

5.2 Property development

The second theme was the significance of property development to road space allocation, since Malmö has several prominent eco-districts and significant growth planned for the coming years. Following the Västra Hamnen (Bo01) redevelopment of the former port industrial area in the early 2000s, the Nyhamnen district is currently planned for redevelopment into another eco-district.

Road space allocation is negotiated between developers and the local authority, which includes key decisions on parking supply and road design. Following the construction of Västra Hamnen, parking became a problem as many of the new residents had motor vehicles that could not be accommodated. In response, new parking facilities were built nearby, which was seen to undermine the eco-district's credentials as a sustainable development:

"The whole Western Harbour is a disaster from a transport point of view. They had the apartments built and there was no space for parking. From the beginning. But then people sold their expensive houses, had two cars, moved in and then realised that they didn't have a parking space. Malmö - do something about it, we need parking." (Interviewee 8)

Property developers in Malmo have formalised working relationships with the municipality, specific to eco-districts such as the Nyhamnen development. This brings together diverse set of commercial operators, of different sizes and approaches to urban development.

"There are working groups, one each for different areas in Nyhamnen, where the owners work together. The meaning is to form the process together, although it takes a lot of time and there is uncertainty over exactly what will be decided on a specific day. The city aims to get agreement on soft parameters, as part of a value-based approach to design. Due to the diversity of developers it is difficult to match interests, between the large and small players." (Interviewee 3)

Car clubs also play a role, providing car-sharing facilities for new developments as an alternative to residents owning and parking their own vehicle on-site.

> *"The construction company pays a monthly fee, we had a goal of signing up 40% of the residents for car-sharing, this equates to a 30% reduction of cars in the area." (Interviewee 4)*

However, interviewees also noted that there was scope to work with developers to come up with alternatives, as the developers themselves often did not want to construct a lot of parking in residential developments, due to the costs:

> *"The developers want more flexible car parking policies, they say if we build an apartment block in the inner city, we won't need to build so much parking, because people who move in there - some will have a car but not everybody. And parking - building parking is expensive - but if we want to build a bit outside, we want to build more parking, adn the parking policies in Sweden are often - you know, if you have one household you should build this much parking, 1.5 parking spaces per apartment, and developers say that this is not good news for us. Because we want to build more parking or less parking, we want it more flexible, so that's an issue." (Interviewee 8)*

5.3 Climate change mobilisations

The third theme was climate action, since the Climate Strike and Fridays for Future movement were both popular in Malmö. This movement mobilises a much broader group of the public, compared to traditional groups (users of specific modes, transport experts or local property owners) seeking to influence decision making. By building public support behind climate action, it reframes road space allocation of broader public interest, as it affects the response to climate change. Interviewees noted that while protest movements are not common in Sweden, the movement is large and mostly comprised of young people:

> *"Sweden is a very calm country, the Swedes, they don't protest or make trouble, they want consensus… But I think the Fridays for Future, that's Swedish, and Greta is very very popular... so that's big, but that's kind of like, that's the youth - not the adults." (Interviewee 8)*

However, other interviewees noted that while the climate agenda influenced many people to travel by bicycle, this can only happen if the infrastructures are in place:

> *"I mean we have the climate discussion of course, and that is of course, one reason that cycling has increased. In Malmö, there are many people who decide not to have a car, they have a bike, but that's doable in Malmö." (Interviewee 6)*

Therefore, if the support for climate action continues, it is likely that this will lead to stronger public support for road space reallocation to support sustainable mobility.

6 Conclusions

This study showed a dynamic local context in Malmö, with a variety of organisations and stakeholders non-government actors advocating for new approaches to road space allocation. A wide range of actors interested in mobility engaged in a range of activities to influence decision-making for road space allocation. This varied from public education and engagement, to direct communications with authorities to provide feedback and support for new schemes.

Similar to many cities, there was strong contestation between those promoting sustainable transport modes and drivers, who wanted space to be maintained for cars. This was particularly prominent in relation to parking, since new residents in the inner city districts were reluctant to give up their private vehicles. The positioning of some political parties, in opposition to sustainable mobility, provided a new way to represent the interests of car drivers in the political arena. At the same time, growing public support for climate action has brought a much wider group of the public to try and influence road space reallocation as a means of responding to climate change.

6.1 City branding

Malmö's strong branding as an environmentally progressive city has been successful in recent years, to attract new residents and establish a strong reputation for ecological innovation. However, early eco-district developments showed a tension between sustainability goals and the demands of new residents to accommodate private vehicles. As the city continues to develop Nyhamnen, the negotiations between developers and local authorities are very important to determine how road spaces are allocated in these areas.

6.2 Contestation articulated through mass movements as well as politics

This research showed two opposing forms of support for road space reallocation. On one side, pro-car policies and positions were established by specific political parties. This gave new opportunities for drivers to ensure their interests are represented through political processes. On the other side, a mass youth movement for climate action is bringing a much larger group of the public to mobilise, although their specific demands for road space reallocation are not yet clearly articulated. The development of these two forms of contestation will be important to influence decision-making in the future.

7 Interviews

Number	Type	Interview type	Date of interview	Members of team present
Interviewee 1	Government stakeholder	Group interview	22/05/2019	J. McArthur, C. Halpern
Interviewee 2	Government stakeholder	Group interview	22/05/2019	J. McArthur, C. Halpern
Interviewee 3	Private sector stakeholder	Face to face	23/05/2019	J. McArthur, C. Halpern
Interviewee 4	Private sector stakeholder	Face to face	24/05/2019	J. McArthur, C. Halpern
Interviewee 5	NGO	Skype	01/10/2019	J. McArthur
Interviewee 6	NGO	Face to face	03/10/2019	J. McArthur
Interviewee 7	NGO	Skype	10/10/2019	J. McArthur
Interviewee 8	Researcher	Face to face	04/10/2019	J. McArthur
Interviewee 9	Researcher	Face to face	03/10/2019	J. McArthur

8 References

Lenhart, J., Bouteligier, S., Mol, A.P.J. & Kern, K. (2014) Cities as learning organisations in climate policy: the case of Malmö. *International Journal of Urban Sustainable Development* 6(1), 89-106, DOI: 10.1080/19463138.2014.889020.

MORE
Multimodal Optimisation of Roadspace in Europe

Impact of the EU legislative framework on cycling infrastructure

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

Version:	**2**
Prepared by:	**Aleksander Buczyński, Policy officer – Infrastructure, European Cyclists' Federation (ECF)**
Checked by:	**Charlotte Halpern, Sciences Po**
Verified by:	**X**
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Table of Contents

1 Introduction

Cycling is traditionally perceived as a local issue, and most of cycle trips are indeed relatively short. However, higher level legislation, including European directives and regulations, can significantly affect how easy (or difficult) is it for local (e.g. municipal) authorities to provide coherent, safe, direct, comfortable and attractive cycling infrastructure.

On the other hand, cycling forms an important and growing segment of European mobility and encouraging its further development across the continent is vital for meeting the goals of high-level European policies, such as the European Commission's White Paper on Transport ambition to reduce the CO2 emission of the transport sector by 20% by 2030.

This contribution to the work done as part of the MORE project on the institutional, organizational, political and regulatory dimension of road space allocation discusses two European legal acts that because of either recent or upcoming changes have a potential of creating a more level playing field for cycling infrastructure across the EU and because of their scope are particularly relevant for the MORE project:

- The directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management (RISM) – recently updated by directive (EU) 2019/1936 of 23 October 2019;
- 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 (TEN-T guidelines) – currently undergoing a comprehensive review process.

The MORE project concentrates on urban feeder roads of the TEN-T network, covered by both directives. But in order to develop an optimal solution for the feeder roads, it is necessary to look also at the wider context and interactions between the analysed road and the neighbouring TEN-T network. For example, providing sufficient density of crossings for pedestrians and cyclists across a ring road that is a part of the TEN-T network can enable alternative corridors for active mobility connecting suburbs with the city centre, instead of channelling all types of traffic into the same urban feeder road. On the other hand, if the city provides space for cycling in the urban feeder route, taking into account the needs of cyclists in the TEN-T interchange area and further on is necessary for optimal use of the developed infrastructure. As growing popularity of electric power assisted cycles (EPACs) increases range of everyday cycling, the continuation of urban routes into the suburbs becomes more and more important,[1] increasing frequency and importance of interactions between cycling networks and TEN-T infrastructure.

[1] See deliverables D1.1 and D3.1.

Because of the difference in the lifecycle stage of the legislative acts, in case of RISM we focus on the review of the recently introduced changes; in case of TEN-T we report practical experiences with application of current guidelines. The report provides also recommendations: for further steps at the EU level to facilitate and maximise the gains of implementing the RISM update, and for the next iteration of the TEN-T guidelines.

The findings reported in this deliverable reflect the state of knowledge up to their first submission date. A revised version will be submitted in August 2021 that will include more recent material.

2 Road Infrastructure Safety Management Directive

The directive 2008/96/EC on Road Infrastructure Safety Management (RISM) defines procedures that were supposed to ensure the safety of the trans-European (TEN-T) road network. The procedures cover different stages and aspects of planning, design and operation of major roads but up until 2019 had almost exclusively focused on the safety of car-occupants. The needs of other road users such as cyclists and pedestrians were often overlooked in the process, resulting in detrimental infrastructure changes, for example an important cycle route cut off from the rest of the network by a motorway interchange.[2]

In November 2019, a revision of the directive was published in the Official Journal of the European Union.[3] The amendments implemented through the directive (EU) 2019/1936 include many important improvements that recognise the need to pay more attention to the safety of cyclists and pedestrians and. The EU Member States now have two years to transpose the updates into national regulations. In this chapter we quote the main changes relevant for cycling infrastructure and discuss briefly their consequences.[4]

[2] See for example, “RISM Directive for Cyclists – Interview with ECF Advocacy Director Adam Bodor” (accessible here: https://ecf.com/news-and-events/news/rism-directive-cyclists-interview-ecf-advocacy-director-adam-bodor) and “Will the EU continue to spend billions on projects that make it unsafe and difficult to cycle to work?” (accessible here: https://ecf.com/news-and-events/news/will-eu-continue-spend-billions-projects-make-it-unsafe-and-difficult-cycle)

[3] Directive (EU) 2019/1936 of the European Parliament and of the Council of 23 October 2019 amending Directive 2008/96/EC on road infrastructure safety management: https://eur-lex.europa.eu/eli/dir/2019/1936/oj

[4] The report is based on earlier analyses of the amendments prepared by ECF during different stages of the legislative process. In the frame of the MORE project the information has been updated to reflect the final wording and numbering of the directive, as published in the Official Journal of the European Union, as well as extended with recommendations for further steps on the EU level.

2.1 Changes in the directive body

2.1.1 Taking the needs of cyclists into account

A new Article 6b “Protection of vulnerable road users” states that:

> “Member States shall ensure that the needs of vulnerable road users are taken into account in the implementation of the procedures set out in Articles 3 to 6a.”

This provision applies to all the procedures defined in the directive:

Road safety impact assessment for infrastructure projects (planning stage),
Road safety audits for infrastructure projects (4 stages):

a) draft design,
b) detailed design,
c) pre-opening,
d) early operation;

Network-wide road safety assessment (roads in operation);
Periodic road safety inspections (roads in operation);
Follow-up of procedures for roads in operation.

'Vulnerable road users’ are defined in article 2 point 10 as “*non-motorised road users, including, in particular, cyclists and pedestrians, as well as users of powered two-wheelers”*.

The provision is very generic but gives a clear indication that the needs of cyclists must also be considered when planning, designing, maintaining and evaluating major roads. The annexes to the directive, also updated, give examples on how to do it (see below), but they are only indicative, so a lot depends on how Member States transpose the directive to national laws.

2.1.2 Guidance on quality requirements regarding vulnerable road users

In Article 4 “Road safety audits for infrastructure projects” the following paragraph 6 is added:

> "**6. The Commission shall provide** guidance for the design of “forgiving roadsides” and “self-explaining and self-enforcing roads” in the initial audit of the design phase, as well as **guidance on quality requirements regarding vulnerable road users. Such guidance shall be developed in close cooperation with Member State experts.”;**

While the guidance for the design of “forgiving roadsides” and “self-explaining and self-enforcing roads” are restricted to the initial audit of the design phase, no such restriction is added for quality requirements for vulnerable road users. Therefore, the quality requirements regarding vulnerable road users should be applicable in all audit phases as well as in other procedures listed above.

The guidance shall be developed in close cooperation with Member State experts.

2.1.3 Training of road safety auditors

In Article 9 “Appointment and training of auditors”, the following paragraph 1a is inserted:

“1a. For road safety auditors taking their training from 17 December 2024, **Member States shall ensure that the training curricula for road safety auditors includes aspects related to vulnerable road users and the infrastructure for such users.**”

In many Member States the training curricula for road safety auditors currently do not include anything specific on pedestrians and cyclists. Therefore, the auditors were not taught to identify hazards relevant for those groups of users. The revision obliges to update the curricula, but with an additional lead time of three years.

2.1.4 Reporting the improvements in protection of vulnerable road users

Vulnerable road users are mentioned also in the new article 11a “Reporting”

“1. Member States shall provide a report to the Commission by 31 October 2025 on the safety classification of the entire network assessed in accordance with Article 5. Where possible, the report shall be based on a common methodology. If applicable, the report shall also cover the list of provisions of national updated guidelines, including in particular the improvements in terms of technological progress and of protection of vulnerable road users. From 31 October 2025, such reports shall be provided every five years.”

The results of network-wide road assessment should be reported to the Commission, together with relevant updates in national guidelines, including in particular improvements in term of protection of vulnerable road users (e.g. new cycling infrastructure standards). Member States are not required to update their national guidelines per se (it might not be necessary), but in case they are having problems with safety of cyclists or pedestrians, the obligation to report gives an additional push to look into the quality of infrastructural guidance regarding these groups of users.

2.1.5 Extension of scope

In Article 1, paragraph 2 and 3 are altered to extend the scope of the Directive from trans-European network exclusively to include also primary roads (connecting major cities and regions) and non-urban roads completed with EU funding:

“2. This Directive shall apply to roads which are part of the trans-European road network, to motorways and to other primary roads, whether they are at the design stage, under construction or in operation.

3. This Directive shall also apply to roads and to road infrastructure projects not covered by paragraph 2 which are situated outside urban areas, which do not serve properties bordering on them and which are completed using Union funding, […]”

There is some flexibility in the definition of primary roads and in the fine print of other paragraphs. But each Member State shall notify to the Commission, by 17 December 2021, the list of motorways and primary roads on its territory and the Commission shall publish the list.

2.2 Changes in the directive annexes

The annexes to the directive provide indicative lists of elements to include in specific procedures.

2.2.1 Annex I. Indicative elements of road safety impact assessments

In section 2, the point (e) is amended as follows:

"(e) traffic (e.g. traffic volume, traffic categorisation by type), including estimated pedestrian and bicycle flows determined from adjacent land-use attributes;"

The road safety impact assessment shall be carried out at the initial planning stage before the infrastructure project is approved (e.g. when examining different variants of the route). The assessment should include estimating the potential of pedestrian and cycling flows from the adjacent land use attributes. This can help to identify problems such as new road creating a barrier for non-motorised traffic (e.g. when located between a settlement and significant workplace) and determine necessary elements of pedestrian and cycling infrastructure to include in the further stages (e.g. best locations for tunnels under the planned motorway).

2.2.2 Annex II. Indicative elements of road safety audits

In section 1, the following point (n) is added:

"(n) […]

ii) provisions for cyclists, including the existence of alternative routes or separations from high speed motor traffic

[…]

iv) density and location of crossings for pedestrians and cyclists,

v) provisions for pedestrians and cyclists on affected roads in the area,

vi) separation of pedestrians and cyclists from high speed motor traffic or the existence of direct alternative routes on lower class roads;"

Section 1 describes the criteria to consider at the draft design stage. Previously cyclists were not mentioned at all at this stage. Point ii) is redundant, as iv) – vi) cover all the important aspects:

The movement of cyclists ALONG the (re)constructed road – sometimes it means a segregated cycle and/or pedestrian path along the road, but in many cases alternative routes on lower class roads can be identified and if necessary adapted to safely share between low-volume, low-speed motorised traffic and cyclists.

The movement of cyclists ACROSS the (re)constructed road – sufficient density of safe and comfortable crossings is necessary for the road to not become a barrier for active mobility.

Other affected roads (e.g. a regional road that will face increased traffic because of a connection to constructed interchange).

2.2.3 Annex IIa. Indicative elements of targeted road safety inspections

The findings of network-wide road safety assessments (see below) should be followed up by targeted road safety inspections (or direct remedial actions). The new annex includes several elements explicitly mentioning vulnerable road users:

> "2. Intersections and interchanges:
>
> […]
>
> (g) existence of pedestrian and cycling crossings.
>
> 3. Provision for vulnerable road users:
>
> (a) provision for pedestrians;
>
> (b) provision for cyclists;
>
> […]
>
> 6. Objects, clear zones and road restraint systems:
>
> […]
>
> (b) roadside hazards and distance from carriageway or cycle path edge;
>
> (c) user-friendly adaptation of road restraint systems (central reservations and crash barriers to prevent hazards to vulnerable road users);"

But, in line with article 6b of the directive, the needs of pedestrians and cyclists should also be considered when analysing other elements (e.g. visibility and sight distances, readability of road signs and markings, lighting, pavement defects etc.)

2.2.4 Annex III. Indicative elements of network-wide road safety assessments

The new procedure of network-wide road safety assessment focuses on collecting data about existing roads to provide input for evidence-based policies. The indicative list of elements includes both cycling traffic and cycling infrastructure:

"2. Traffic volumes:

(d) observed bicycle volumes on both sides, noting "along" or "crossing";

[…]

(g) estimated bicycle flows determined from adjacent land use attributes."

Bicycles can often bidirectionally cycle on both sides of a highway, e.g. on bidirectional cycle paths or service roads, and the measurement methods sometimes need to be adapted to take that into account. Moreover, to correctly assess main roads it is important to quantify not only cycle traffic along the road, but also crossing it. In cases of e.g. bypasses number of cyclists moving across the assessed road might be much higher than along.

"5. Geometric characteristics:

(a) cross section characteristics (number, type and width of lanes, central median shoulders layout and material, cycle tracks, foot paths, etc.), including their variability; […]"

"10. Vulnerable road users' facilities:

(a) pedestrian and cycling crossings (surface crossings and grade separation);

(b) cycling crossings (surface crossings and grade separation);

[…]

(e) bicycle facilities and their type (cycle paths, cycle lanes, other);

[…]

(g) pedestrian and cycling crossing facilities on entry arm of minor road joining network;

(h) existence of alternative routes for pedestrians and cyclists where there are no separated facilities."

Point 10(b) is redundant (cycling crossings are already covered by (a)), a result of multiple amendments with the same intention voted at once. But the indicative list of facilities to assess on existing roads contains key elements for cyclists:

- facilities along the assessed road,
- crossings across the assessed road,
- crossings on entry arms of minor roads.

The assessment should include the type of the facility as well, as for example cycle paths have different range of applicability than cycle lanes. In case there are no facilities for

pedestrians and/or cyclists along the assessed road, the annex indicates that it is important to identify whether these groups of users have an alternative route e.g. on parallel lower-class roads.

2.3 Recommendations

1. Quality requirements regarding vulnerable road users as defined in the article 4 paragraph 6 of the directive can be a powerful tool to prevent wasting public funding on infrastructure that is unsafe to use or not used at all. To maximise the tool's potential, the group working on the requirements should include both practitioners from champion cycling countries like the Netherlands or Denmark, that can inspire with best practice, new ideas, years of experience and research, as well as beginner countries that can provide a reality check on what can be implemented across the whole of Europe. Apart from Member States' experts, user perspective should also be represented in the group.

2. The needs of cyclists should also be taken into account in other guidance documents that the directive foresees prepared on the EU-level:
   a) Guidance for forgiving roadsides (article 4 paragraph 6 of the directive) – as various measures in this area (e.g. traffic barriers, frangible poles) often represent a trade-off: increased safety of car-occupants is achieved at the expense of safety of pedestrians and cyclists.
   b) Guidance for the methodology for carrying out systematic network-wide road safety assessments and safety ratings (article 5 paragraph 5) – as safety of cyclists needs also to be assessed.
   c) Assessment of the opportunity to establish common specifications including different elements aiming at ensuring the operational use of their road markings and road signs in order to foster the effective readability and detectability of road markings and road signs for human drivers and automated driver assistance systems (article 6c paragraph 2) – as there is a great diversity of signs, markings and rules of the road regarding cyclists, especially taking into account new forms of cycling infrastructure (e.g. cycle streets, cycle highways),[5] much less standardised across Member States than other signs.

3. Although not specifically requested by the directive, an EU-level analysis of the best practices and common mistakes in training curricula for road safety auditors regarding aspects related to vulnerable road users and the infrastructure for such users would significantly facilitate implementation of article 9 paragraph 1a of the directive.

[5] The subject is further discussed in Annex 8 to this report, comparing legal framework for cycling infrastructure across different EU Member States.

3 Union guidelines for the development of the trans-European transport network

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.[6] The current TEN-T policy is based on 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.[7]

TEN-T comprises two networks 'layers':

- The Core Network includes the 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 Regulation foresees that, by 31 December 2023, the Commission shall carry out a review of the implementation of the core network, evaluating: compliance with the TEN-T provisions, progress in the implementation, changes in passenger and freight transport flows, developments in national transport infrastructure investments, and the need for amendments. The review process has already started, with public consultation on the evaluation of existing guidelines open for feedback 24 April 2019 - 17 July 2019.[8] The results of this evaluation are expected by mid-2020. The European Commission committed to address in the process issues such as standards and infrastructure requirements, implementation tools or various aspects of the comprehensive network, as well as soft measures.

The chapter discusses existing references to cycling in the TEN-T guidelines, approach to cycling infrastructure in current practice of TEN-T projects, and recommendations how to better integrate cycling in the next edition of the TEN-T guidelines.

[6] https://ec.europa.eu/transport/themes/infrastructure/ten-t_en

[7] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1315

[8] https://ec.europa.eu/transport/themes/infrastructure/consultations//trans-european-transport-network-ten-t-guidelines-evaluation_en

3.1 Existing regulation No 1315/2013

3.1.1 Cycling contribution to the TEN-T objectives

Cycling has a potential to contribute significantly to the objectives of the TEN-T, as defined in article 4 of the current regulations:

(a) “cohesion through:

- accessibility and connectivity of all regions of the Union” as the EuroVelo network connects the most remote, outermost, insular, peripheral and mountainous regions, as well as sparsely populated areas;
- “reduction of infrastructure quality gaps between Member States”, by providing quality and planning requirements in Member States with less experience with regards to cycling infrastructure;

(b) “efficiency through:

- the removal of bottlenecks” especially in case of land transport where the parallel cycling infrastructure (e.g. cycle highways) can release capacity for long-distance motorized transport;
- “the interconnection and interoperability of national transport networks”, should be also realized in case of the cycle route networks as many of them has already cross-border links, especially in urban areas located close to national borders;
- “optimal integration and interconnection of all transport modes” – is only possible if cycling is included in the design and implementation of road, rail, harbour and airport projects in the frame of TEN-T;
- “the promotion of economically efficient, high-quality transport” – the return of investments using cycling developments even the high-quality high capacity version of it (cycling highways) is much faster mostly because of the benefits from congestion reduction, public health and CO2 reduction;
- “efficient use of new and existing infrastructure” – cycling infrastructure can accommodate higher number of users and to increase capacity in urban areas where the TEN-T corridors facing challenges of the limited space;

(c) “sustainability through

- development of all transport modes, contribution to the objectives of low greenhouse gas emissions, low-carbon and clean transport” is only achievable if the active modes such as cycling are taken into account;

(d) “increasing the benefits for its users through:

- meeting the mobility and transport needs of its users” as cycling is getting more and more popular;
- “ensuring safe, secure and high-quality standards” – should also apply to standards for cycling infrastructure;

- "supporting mobility even in the event of disasters, and ensuring accessibility to emergency and rescue services" – service roads provide a synergy between infrastructure for cycling, emergency and rescue services;
- "accessibility for elderly people, persons of reduced mobility and disabled passengers" – would benefit significantly from the ramps, lifts, subways etc. built for cycling purposes.

3.1.2 Existing direct references to cycling and EuroVelo

Through regulation (EU) No 1315/2013 a direct reference to cycling and EuroVelo was included in the TEN-T Guidelines for the first time. The wording is as follows (Recital 9):

> "When implementing projects of common interest on the TEN-T, due consideration should be given to the particular circumstances of the individual project. Where possible, synergies with other policies should be exploited, for instance with tourism aspects by including on civil engineering structures such as bridges or tunnels bicycle infrastructure for long-distance cycling paths like the EuroVelo routes."

Whilst the wording represented a step in the right direction, it was someway short of the approach recommended by ECF in the previous review procedure, which was to get the whole of the EuroVelo European cycle route network formally recognised as part of the TEN-T network.

In the Connecting Europe Facility (CEF) Calls that have been published during the current financial period, references to cycling and EuroVelo have featured. For example:

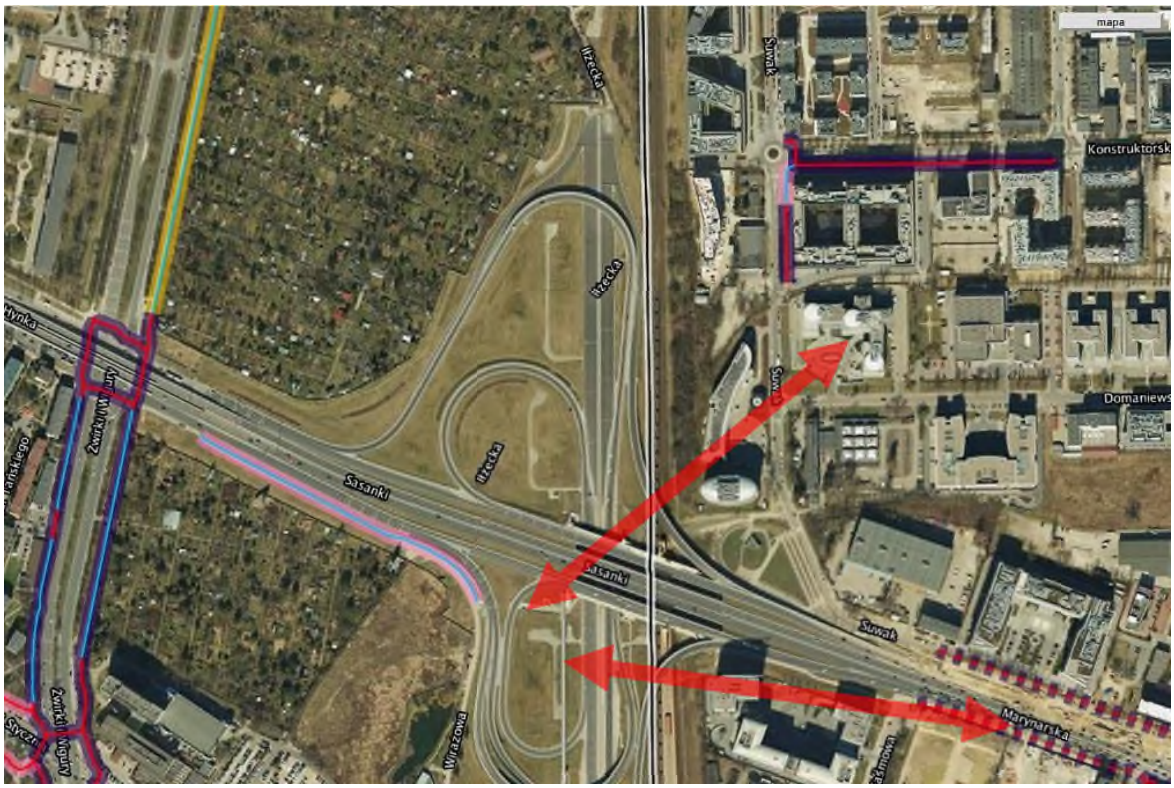
"*Where applicable as part of a broader project of common interest, actions may include activities for the adaptation of TEN-T infrastructure to ensure the continuity of bicycle infrastructure for long-distance cycling paths such as the EuroVelo routes. These activities may include relevant adaptation of traffic signaling systems or the addition of infrastructure dedicated to cyclists and pedestrians, such as tunnels, bypasses, bridges, aerial cycling and walkways and protected cycling paths. They may cover activities extending along TEN-T routes or at crossings between TEN-T routes and long-distance cycling paths.*"[9]

Several projects have taken advantage of this opportunity, but it seems that the legal basis (and the CEF Calls that were published based on it) were not encouraging enough for applicants.

9 https://ec.europa.eu/inea/sites/inea/files/download/calls2014/cef_transport/calltexts/__140910_cef_transport_annual_call_final.pdf

3.2 Cycling infrastructure in current practice of TEN-T network

Currently, cities and regions investing in cycling often consider elements of the TEN-T network a barrier and obstacle to development of active mobility. Sections of cycle routes along or across the TEN-T corridors are the most expensive and difficult to construct.[10] Motorways and ring-roads cut off suburbs from core urban areas. In extreme cases, TEN-T (re)construction projects have uprooted or cut in two existing cycle paths or routes.[11]



Construction of the Marynarska interchange in Warsaw, Poland, funded from the EU's Cohesion Fund, under the "TEN-T road and air transport network" priority, had a negative impact on the cohesion of the city cycling network. A business district, where 100,000 people work, was effectively cut off from

[10] For example, on the F3 cycle highway in Belgium the cost of the cycling bridge across the Brussel ring road (part of 3 TEN-T core road corridors, TEN-T high speed rail corridor, and TEN-T airport) is estimated to 13 million euro – more than all the other necessary investments between Brussel and Leuven combined.

[11] E.g. the construction of M5 motorway in Hungary (part of Budapest – Belgrade connection) cut a popular existing cycle path connecting towns of Mórahalom and Domaszék with the city of Szeged. The cycle path was used both for commuting and as a part of EuroVelo route 13. In the consequence of the motorway construction the cycling connection is interrupted, because the junction of the M5 and national road 55 does not include any cycling facility in the complicated interchange. The construction of a separate cycle bridge and additional cycling infrastructure will be necessary.

southwestern Warsaw. It also made it more difficult to access a TEN-T airport and a popular station on a TEN-T railroad line.[12] Background map and existing cycling routes: mapa.um.warszawa.pl.

3.2.1 Cycle routes along TEN-T corridors

At the same time, many TEN-T corridors provide an excellent opportunity for developing high-quality routes for active mobility as well. In particular, cycle highways along the TEN-T railroad lines, including sections of high-speed lines, have proven to be successful projects already in several Member States.[13] Cycle routes along inland waterways can serve both everyday commuting[14] and long-distance cycle tourism.[15] The key success factors include low gradients and limited amount of crossings with road network (and the easiness of integrating grade-separated crossings for cyclists at the locations roads cross a TEN-T railroad or waterway).

The F1 cycle highway in Belgium between Mechelen and Antwerp follows a high-speed TEN-T railroad line. The benefits of the investment outweigh the costs as much as 14 times.[16] Photo credit: ECF.

[12] "Will the EU continue to spend billions on projects that make it unsafe and difficult to cycle to work?" https://ecf.com/news-and-events/news/will-eu-continue-spend-billions-projects-make-it-unsafe-and-difficult-cycle

[13] For example, cycle highways F1 Mechelen – Antwerp and F3 Brussels – Leuven in Belgium, RS1 near Mülheim in Germany, de Liemers (Arnhem – Zevenaar) in the Netherlands.

[14] E.g. cycle highways F5, F13, F17, F20, F23 or F78 in Belgium.

[15] E.g. EuroVelo 6 along Danube, EuroVelo 8 along Po, EuroVelo 15 along Rhine, EuroVelo 17 along Rhone, EuroVelo 19 along Meuse.

[16] "Health impact model for modal shift from car use to cycling or walking in Flanders: application to two bicycle highways": https://doi.org/10.1016/j.jth.2015.08.003.

There is also significant existing or potential cycle traffic along the TEN-T road corridors. Typical contexts, where this currently happens, include:

- Roads that connect suburban areas or satellite towns with the main city of an agglomeration;
- Legacy road with housing and workplaces developed along it, upgraded to expressway or motorway status;
- Ring road with workplaces (shopping malls, outlets, warehouses, business parks etc.) developing along it;[17]
- A single connection across a barrier where cyclists have no choice but to use, for example, a bridge across a major river, road leading to border crossing, coastal road, mountain pass, etc…;
- Alternative routes also carry heavy traffic and provide even worse conditions for cycling (narrow carriageway with no hard shoulders, poor surface quality…)

Up until recently the road administrations responsible for the TEN-T network have focused mostly on car traffic, but there is a growing recognition that in the future more focus will be needed on taking into account the needs of cyclists and pedestrians.[18] Providing safe and attractive conditions for active mobility can release capacity for transnational traffic on many sections of TEN-T roads, currently used also (or even mostly[19]) by regional or local car traffic. Part of that traffic can be removed by providing an alternative transport mode option.

[17] E.g. on the section of S8 expressway in Warsaw which was equipped with cycling paths 200-400 bicycles/peak hour were counted in May-June 2017: http://rowery.um.warszawa.pl/sites/rowery.um.warszawa.pl/files/Warszawski%20Pomiar%20Ruchu%20Rowerowego%202017%20-%20cz%C4%99%C5%9B%C4%87%20opisowa.pdf

[18] E.g. CEDR Position pager 2016 “Main Road Safety Challenges for European Road Directors the Next 5-10 Years – Towards the Vision Zero”: http://www.cedr.eu/download/Publications/2016/Main_Road_Safety_Challenges_for_European_Road_Directors_Oct2016.pdf. An example of a new approach is Highways England Interim Advice Note 195/16 “Cycle Traffic and the Strategic Road Network” http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian195.pdf

[19] E.g. in 2015 the annual average daily traffic on S8 expressway in Mazovian voivodship in Poland varied from 14,000 vehicles/day at the border with Podlaskie voivodship (95 km from Warsaw) to 30,000 vehicles/day at the bypass of Radzymin (15 km from Warsaw) and 142,000 vehicles/day in Warsaw. The huge increase in traffic on the last 15 km implies that most of it is generated by commuting on distances that can be also served by (electrically assisted) bicycle.

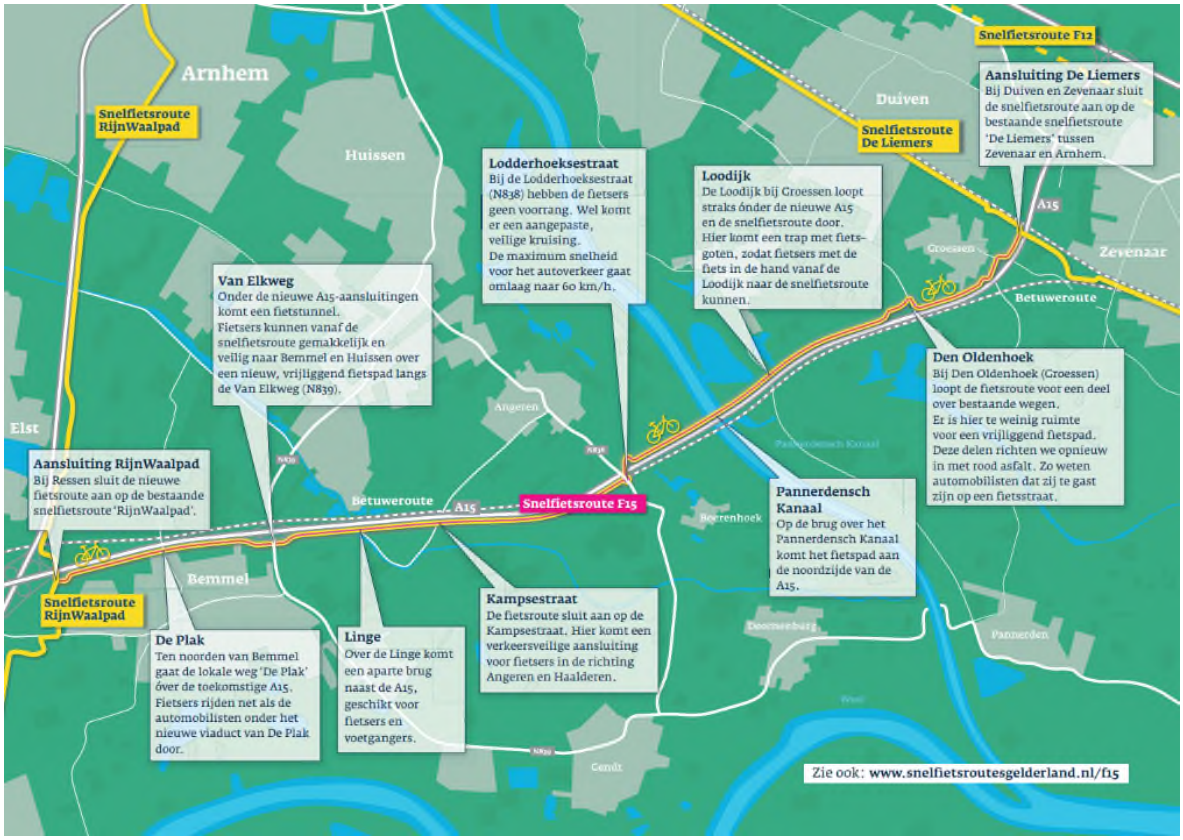
TEN-T roads often do not provide sufficient pedestrians and cycling infrastructure. Triq l-Imġarr, Ghajnsielem, Malta. Photo credit: ECF.

It is worth noting that many TEN-T corridors (road, railroad, inland waterways) are accompanied by so-called **service roads** – either to provide access to housing, agricultural, forestry areas along the corridor, or for maintenance or emergency purposes. These service roads typically carry very low volumes of motorised traffic and can be safely shared by pedestrians and cyclists. For a relatively small cost they can be connected by short sections of cycling infrastructure to form a continuous link for active mobility.[20] Making this extra step improves the efficiency of investments and serves to make better use of existing infrastructure.

[20] E.g. “Rowerowa S5”: an initiative by local municipalities to connect service roads along the S5 expressway in Poland into a continuous safe cycle highway: http://www.portalsamorzadowy.pl/inwestycje/burmistrz-rawicza-proponuje-rowerowa-trase-z-wroclawia-do-poznania-wzdluz-s5,76477.html

The F3 cycle highway Brussels - Leuven in Belgium reuses, to a large degree, service roads built as a part of an upgrade of a TEN-T railroad corridor to high speed standard. However, several critical bridges and tunnels were not included in the upgrade project and now have to be constructed separately, at higher cost and with disruptions for users.[21] Photo credit: ECF.

[21] Presentation of the F3 cycle highway from the Cycle Highway Academy in Leuven, October 2018: http://www.nweurope.eu/media/4636/20181010-cha5-3b-introduction-to-f3-deel-cha.pdf



Planned integration of the cycle highway F15 in the extension of the A15 motorway, part of the TEN-T road network (Netherlands). Infographics source: www.snelfietsroutesgelderland.nl/F15

3.2.2 Cycle crossings across TEN-T corridors

Insufficient density of crossings over/under a motorway or a railroad line creates a barrier for active mobility modes. While a few kilometres detour can be acceptable for car traffic, it usually makes the distance prohibitive for daily walking or cycling trips, contributing to shift to unsustainable transport modes.

Additionally, if a TEN-T corridor is only crossable by main roads, this may concentrate the pedestrian and cycling traffic on this main road. Even if this main road is redesigned and equipped with segregated pedestrian and cycling infrastructure in the crossing area, it might not have continuation further on. Therefore, insufficient density of crossings might have negative impact on road safety and mobility even a few kilometres away from the TEN-T corridor, which may not be reflected in a simple analysis of the corridor itself.

As a part of the Rail Baltica corridor, a 10 km section of the line between Zielonka and Wołomin in Poland (red line) was upgraded to quadruple track with co-financing from the EU's Cohesion Fund (Operational Programme "Infrastructure & Environment", priority axis "Environment-friendly transport"). The section cuts in half 3 towns with a total of 90,000 inhabitants, but only 1 cycle crossing (in blue) was provided in the project (in comparison to 5 crossings for cars). Background map data © Google.

3.2.3 Impact of TEN-T projects on wider area

TEN-T projects often have impact on the road network in the area few kilometres from the (re)constructed infrastructure. For example, a regional road with previously low traffic, where cyclist had been able to safely cycle on the carriageway, becomes an important link to a newly constructed motorway. The resulting increase in traffic might make it necessary to segregate pedestrian and cycling traffic.

Similarly, construction or extension of an airport or seaport can increase the traffic on the roads providing access to it. TEN-T airports and seaports are important centres of commercial activity, often offering a concentration of workplaces.[22] To ensure good accessibility in busy urban nodes, an option to arrive by bicycle, both by commuters and tourists, should also be available. Pilot projects to ensure cycle highway access to major airports are already underway.[23]

[22] E.g. approximately 81,000 people work in 450 companies and organisations concentrated in Frankfurt Airport City.

[23] Cycle highway connecting Frankfurt Airport with the city centre or integrating access to business districts around Brussels Airport into development plans of the F3 cycle highway Brussels – Leuven.

On the other hand, if a TEN-T road (re)construction project provides a new route for the long-distance traffic to bypass e.g. settlements, the old route needs to be adapted to the new role (e.g. by introducing traffic calming, cycle lanes etc.). Up until now, this has usually not been a part of TEN-T projects, therefore effects such as improving safety and quality of life by removing the long-distance traffic from the sensitive area were dependant on further actions of local municipalities[24] or achieved only temporarily.

Field presentation of the planned cycle highway connecting Frankfurt Airport with the city centre, during the final conference of the CHIPS (Cycle Highways Innovation for smarter People transport and Spatial planning) EU project, May 2019. Photo credit: ECF.

3.3 Recommendations for the guidelines update

The upcoming update of the TEN-T guidelines can turn current barriers into opportunities. If critical elements of cycle infrastructure are integrated in TEN-T networks and projects,

[24] An interesting example of retrofitting of the F1 cycle highway on the N1 road bridge over the A1 motorway in Belgium has been discussed in MORE deliverable D1.1.

existing infrastructure can be used more efficiently[25], higher quality and more functionality can be provided for a lower price,[26] leading to better use of public funding.

The principle has already been included in the recent revision of the **Directive 2008/96/EC on road infrastructure safety management**, which obliged Member States to **take into account the needs of vulnerable road users, such as pedestrians and cyclists**, in the implementation of directive procedures (see section 1 of the annex). The same approach should also be reflected in the TEN-T guidelines, as well as extended from roads only to all the TEN-T networks.

In addition to safety benefits considered in the aforementioned directive, high quality cycle infrastructure has a potential for releasing congested sections of long-distance routes from short-distance traffic. Providing a cycle highway is usually cheaper than e.g. adding motorway lanes for short-distance commuters.[27] The number and length of sections of TEN-T corridors that need solutions for cycling will increase with growing popularity of electric power assisted bicycles (EPACs)[28] and development of fast cycling routes (cycle highways).[29]

Key recommendations:

1) Fully integrate EuroVelo, the European cycle route network, into TEN-T, including it as one of the networks;

2) In all projects on other TEN-T networks: evaluate the potential for cycling traffic in the affected area and integrate necessary elements of cycling infrastructure in project planning, design and construction. Depending on the network and type of project, this should include one or more of the measures listed in the table. Wherever such measures are missing on an already completed section of TEN-T corridors, they should be eligible for EU funding as independent projects.

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[25] E.g. F3 cycle highway between Zaventem and Herent making use of service roads build as a part of TEN-T railroad corridor upgrade.

[26] In the Dutch province of Gelderland, cycle highway F15 was integrated in the design extension of the A15 motorway (part of the TEN-T comprehensive network). The costs are estimated to be three times lower than in case of F325, built as an independent project along A325 motorway.

[27] A study undertaken by Dutch consultancy Goudappel Coffeng concluded that building 675 km of cycle highways would reduce time spent in congestion in the Netherlands by 3.8 million hours per year. A further 9.4 million hours of car travel time could be saved each year if the use of electric bicycles increased. Similarly, a traffic demand study in Germany's densely populated Ruhr area estimates that the 101-km long cycle highway RS1 can remove up to 50,000 motorised vehicle journeys. The total cost of RS1 is projected at €180 million (€1.8 million/km), which is significantly more cost efficient than motor vehicle road projects.

[28] Further discussed in Deliverable D3.1 Analysis of Technological Advances.

[29] In the Netherlands, the numbering of fast cycling routes (snelfietsroutes) already mirrors the numbers of motorways. The cycle highway does not necessarily stay just next to the motorway, it might lead on local roads 500 m away, but connects the places along the motorway and is a part of integrated mobility solution (Park&Bike facilities etc.)

Measure	Railways	Roads	Inland waterways	Maritime (ports)	Air (airports)
Cycle routes along TEN-T corridors	+	+	+		
Safe and comfortable cycle crossings across TEN-T corridors	+	+	+		
Upgrade of other roads affected by TEN-T projects to safe standard for cycling		+		+/-	+/-
Cycling connections in TEN-T urban nodes		+/-		+	+

MORE
Multimodal Optimisation of Roadspace in Europe

Comparison of national legislative frameworks for cycle infrastructure number

Annex to D2.3 report

Start date of project:	**1st September 2018**	Duration:	**36 months**

Version:	**2**
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Table of Contents

Introduction

Cycling is traditionally perceived as a local issue, and most of cycle trips are indeed relatively short. However, higher level legislation, in particular national regulations on signs and signals, can significantly affect how easy (or difficult) it is for local (e.g. municipal) authorities to provide coherent, safe, direct, comfortable and attractive cycling infrastructure.

Having proper traffic management tools can help create a good cycle route, while at the same time managing road space more efficiently and avoiding the many conflicts between motorists, cyclists and pedestrians. The MORE project, co-financed by the Horizon2020 program of the European Union, concentrates on urban feeder roads of the TEN-T network. For such roads often a painted cycle lane or even segregated cycle path might not always be the best option available, as in some cases parallel local streets offer potential for a higher quality cycle route: more direct, with less traffic lights, less noise and air pollution, but also with less conflicts with pedestrians around public transport stops. Unfortunately, in many countries legal provisions for allowing contraflow cycling, cycle streets or other cycle-friendly forms of traffic calming on these more local streets are missing, unclear or prohibitively restrictive.

The MORE project aims for efficient use of road space. For cities to achieve this, national legislation has to accommodate a range of multimodal design solutions. Because cycling is a relatively new mode of transport in many countries and has therefore only minimally standardised on the international level, the legislative provisions are often lacking particularly for cycling infrastructure.

The study (annex 9 to the 2.3 report) currently includes an analysis of 11 elements that we consider of particular relevance for the development of cycling infrastructure on urban feeder roads. Legislation of the following 11 states was included:

- Belgium
- Croatia
- Germany
- Hungary
- Italy
- Luxembourg
- Poland
- Portugal
- Slovenia
- Spain
- UK

Further information about legislation regarding cycling traffic and cycling infrastructure in Denmark and the Netherlands can be seen in the ECF's Safer Cycling Advocate Program

Best Practice Guide.[1] A brief introduction to French regulations is available in "The carrot versus the stick. Over 30 years of evolution of French bike regulations" by Olivier Schneider.[2]

The analysed solutions include:

- Cycle tracks
- Cycle lanes
- Cycle streets
- Contraflow cycling
- Cycling in bus lanes
- Cycling on the sidewalk
- Advanced stop lines / bike boxes / bike locks
- Right of way on cycle crossings
- Special rules/provisions for left turning for cyclists
- Exemptions from traffic lights for cyclists
- Wayfinding

For each of the listed solutions, we compared the definitions, signage, rules applying to road users (obligations/prohibitions for different groups of users) and to public administrations (conditions for applying the solutions). The comparison does not include design parameters for typical infrastructure (e.g. widths of cycle tracks/lanes etc.), as these have been covered in detail in MORE's deliverable D1.2. Urban Corridor Road Design: Guides, Objectives and Performance Indicators.

The following international legislation is used as a point of reference:

- Vienna Convention on Road Traffic[3]
- Vienna Convention on Road Signs and Signals[4].

The findings reported in this deliverable reflect the state of knowledge up to their first submission date. We acknowledge that several important EU Member States are still missing from the picture, therefore the findings should be treated as preliminary, subject to revision when more national legislations are added to the comparison. For selected solutions, information about countries with yet incomplete fiches (Austria, Denmark, France, Norway, the Netherlands, Romania and Switzerland) are available on demand. A revised version will

1 https://safercycling.roadsafetyngos.org/best-practice-guide/

2 https://ecf.com/sites/ecf.com/files/Schneider.O_French_Regulations.pdf

3 Consolidated version: https://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_traffic_EN.pdf

4 Text: http://www.unece.org/fileadmin/DAM/trans/conventn/signalse.pdf; consolidated version including diagrams: http://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_signs_2006v_EN.pdf

be submitted in August 2021 that will include more recent material, including one sheet per country, references to source documents and a full list of contributors.

Cycle tracks

A "cycle track" is defined in the Vienna convention on road traffic as an independent road or part of a road designated for cycles, signposted as such. A cycle track is separated from other roads or other parts of the same road by structural means. Minor variations in national definitions include, for example, the possibility to separate not only by structure itself, but also by road safety equipment (so called “light separation”) or sufficient space (e.g. 75 cm buffer space in Hungary).

Cycle track sign D, 4 in the Vienna Convention on Road Signs and Signals.

Non-compulsory cycle track sign in Luxembourg (not defined in the Vienna Convention on Road Signs and Signals). Similar signs are in use in Austria, Belgium, Denmark, France.

- Compulsory cycle tracks in all the analysed countries (and non-compulsory in the UK) are signed with Type A mandatory signs (D, 4 in the Vienna Convention on Road Signs and Signals).
- Most countries have provisions for combining cycle and pedestrian tracks, and common signs to designate such combined tracks.
- Many countries distinguish compulsory and non-compulsory cycle tracks. Provisions for non-compulsory cycle paths are missing in countries with lower levels of cycling (Croatia, Italy, Poland, Slovenia, Spain).
- Most countries (France, Belgium, Luxembourg, Austria, Denmark) that provide non-compulsory cycle tracks, designate them with signs similar to mandatory ones, but square instead of round (not defined in the Vienna Convention on Road Signs and Signals, but in line with its logic). Germany, Hungary and the Netherlands developed their own signs for non-compulsory cycle tracks.

Both compulsory and advisory cycle tracks possible	Only compulsory cycle tracks	Only advisory cycle tracks
Austria, Belgium, Denmark, France, Germany, Luxembourg, the Netherlands	Croatia, Hungary,[5] Italy,[6] Poland, Slovenia, Spain	Portugal (?)[7], UK, Norway

Cycle lanes

According to the Vienna Convention on Road Signs and Signals, a "cycle lane" means a part of a carriageway designated for cycles. A cycle lane is distinguished from the rest of the carriageway by longitudinal road markings.

- Most countries distinguish between compulsory and advisory cycle lanes.
- Most countries sign cycle lanes with signs by the side of the road, in addition to horizontal markings. These signs are not standardised across Europe: some countries use the same signs for cycle lanes as for cycle tracks (e.g. Belgium, Luxembourg), some extend the signs designating lanes for other vehicles (e.g. Poland, Hungary, Spain), some have special signs for cycle lanes only (e.g. UK).
- Several countries restrict the use of cycle lanes to built-up areas (Germany, Hungary, Poland), under the assumption that the solution is not suitable when the speed of motorised traffic is high (speed limits outside built-up areas are 100 km/h in Germany, 90 km/h in Hungary and Poland). However, this approach does not take into account the possibility to apply lower speed limits on lower class roads outside built-up areas, either as a general rule (70 km/h in Flanders, Belgium) or on roads signed as such (60 km/h in the Netherlands).
- (only?) UK contains provisions for cycle lanes operating at certain hours or days of the week8.

[5] Cycle tracks are compulsory unless there are sharrows on the carriageway. NB: A sharrow is a bicycle pictogram with arrows (chevrons), used on a carriageway to indicate recommended position of bicycles and/or alert other users to the possibility of presence of cyclists.

[6] Cyclists are not obliged to use combined pedestrian and cycle tracks.

[7] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

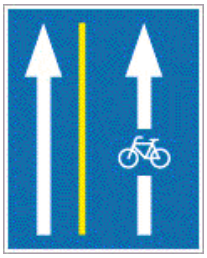
[8] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

- Italian Road Code (?)9 requires all new roads of category C, D, E, F (extra-urban secondary, urban fast, urban slow and local streets) to have a cycle lane unless it is impossible for safety reasons (must be in line with multi-year local plans). The road authority must also ensure temporary cycling lanes in case of extraordinary maintenance of the road (if no safety problems and in line with multi-year local plans).[10]

Examples of different roadside signs denoting cycle lanes:

Belgium, Luxembourg (compulsory cycle lanes only)

Poland, Spain



Hungary

UK

Cycle streets

Cycle streets are streets where (selected) other vehicles are permitted but cycling is somehow prioritised. As a relatively new concept, not included in the Vienna convention on road traffic, the diversity in how the solution is defined, applied and used is significantly higher for cycle streets than cycle tracks or cycle lanes.

The table below summarises several identified approaches. The commonly (but not always) repeating elements are speed limit of 30 km/h, prohibition to overtake cyclists, permission to cycle 2 or more abreast.

	Germany	The Netherlands	Belgium	Luxembourg	France, Spain, Switzerland	Croatia, Italy, Poland, Portugal,

[9] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

[10] These sound like very strong requirements, but according to FIAB in practice the road administration often ignores by simply saying it is not in line with their multi-year plan.

						Slovenia, UK
Sign	244.1 	L1002 	F111 	E,18a 	Experiments in progress, no settled signs and/or rules yet	No provisions for cycle streets
Speed limit	30 km/h	Set by a separate sign	30 km/h	30 km/h		
Other vehicles allowed?	Only if explicitly listed under the sign	Yes	Yes	Only local residents		
Overtaking cyclists allowed?	Yes	Yes	No	No		
Other rules for road users	Riding two abreast allowed (on other streets – only if it does not hinder traffic)	-	Cyclists can use full width of the street	Cyclists can use full width of the street; parking only allowed on dedicated places		
Conditions for applying the solution	Only to be used if cycling is (or is expected to be) the dominant form of traffic in the street		-	?[11]		

More than a half of the analysed Member States did not have legal provisions for cycle streets. This in itself might not be a critical issue, as the solution is meant for streets where cycling is a dominant form of traffic, and in beginning countries this will be a relatively rare situation. If there are no specific provisions for cycle streets, municipalities can usually still use tools like filtered permeability to reduce the volume of motorised traffic, calm the traffic and create a substitute of a cycle street.

[11] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

Across the analysed legislations the most problematic regulations for incorporating local streets in cycle routes were identified in Croatia where:

- articles 51 and 69 of the Road Code oblige slower vehicles to move to the right or pull aside for faster traffic if a queue is formed behind them, or if roadway is not wide enough or other conditions prevent safe overtaking;[12] [13]
- "under normal circumstances" municipalities cannot apply a speed limit lower than 40 km/h.

This means that even on local streets cyclists are not treated as equal road users and the motorised traffic cannot be slowed down to speeds safe for mixing with cyclists.

Contraflow cycling

Contraflow cycling allows a street that is one-way for cars to be used for cycling in both directions. The idea stems from the observations that:

- a street might be too narrow for two cars to pass each other, but still wide enough for a car and a bicycle;
- one-way streets often serve to filter out through-traffic from residential areas to protect local streets from motorised through traffic, but of course would not be necessary for cyclists since cycling does not generate noise, pollution or substantial safety hazard for inhabitants.

No Member State gives a blanket permission for cyclists to cycle against the flow of motorised traffic, plates with exception need to be added under the one-way signs.

- In most countries the administrative regulations allow to add an exception for cyclists under one-way signs without any dedicated infrastructure if the traffic speed is limited to 30 km/h.

Example signs for contraflow cycling:

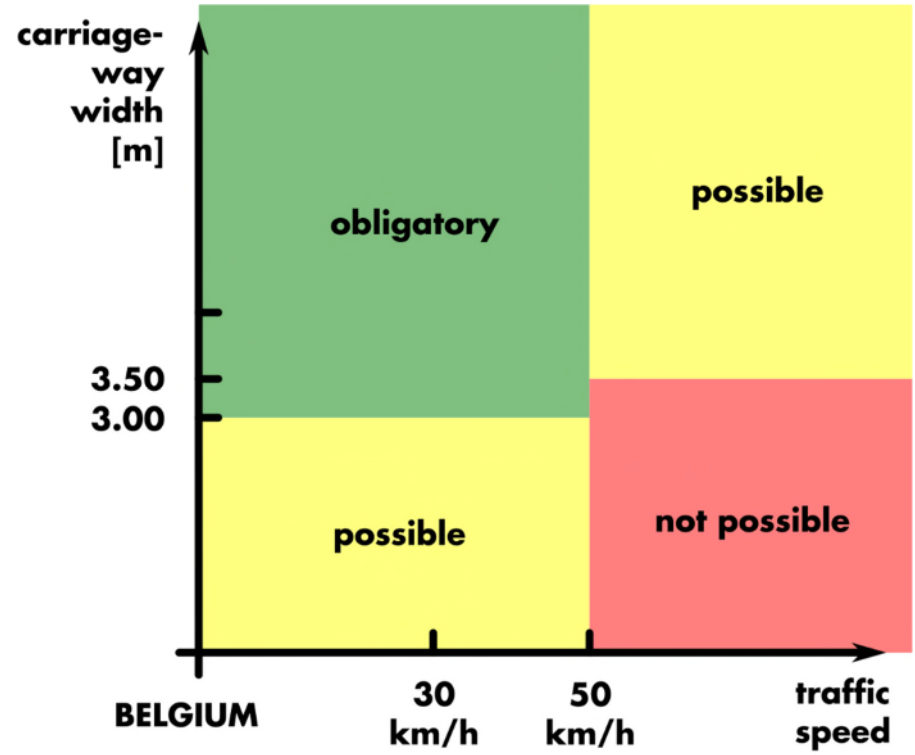
Luxembourg	Poland	UK

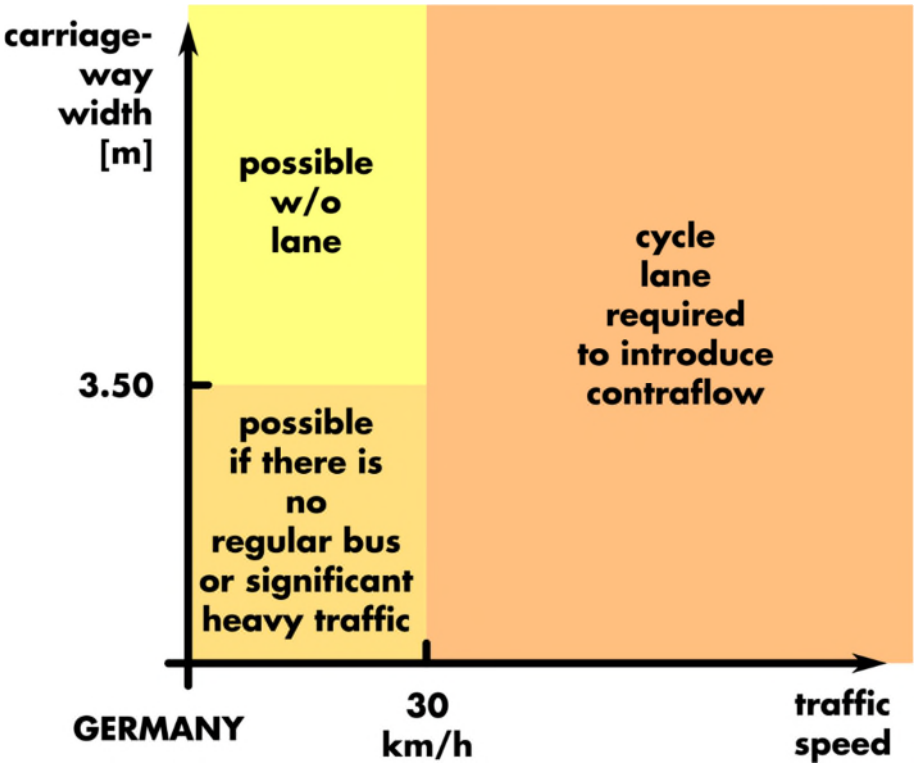
[12] Similar regulation existed in Poland until it was repealed in 2011 as a part of cycling friendly revision of the highway code: https://www.eltis.org/discover/news/civil-society-triggers-cycling-friendly-changes-polish-highway-code-0; http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20110920530

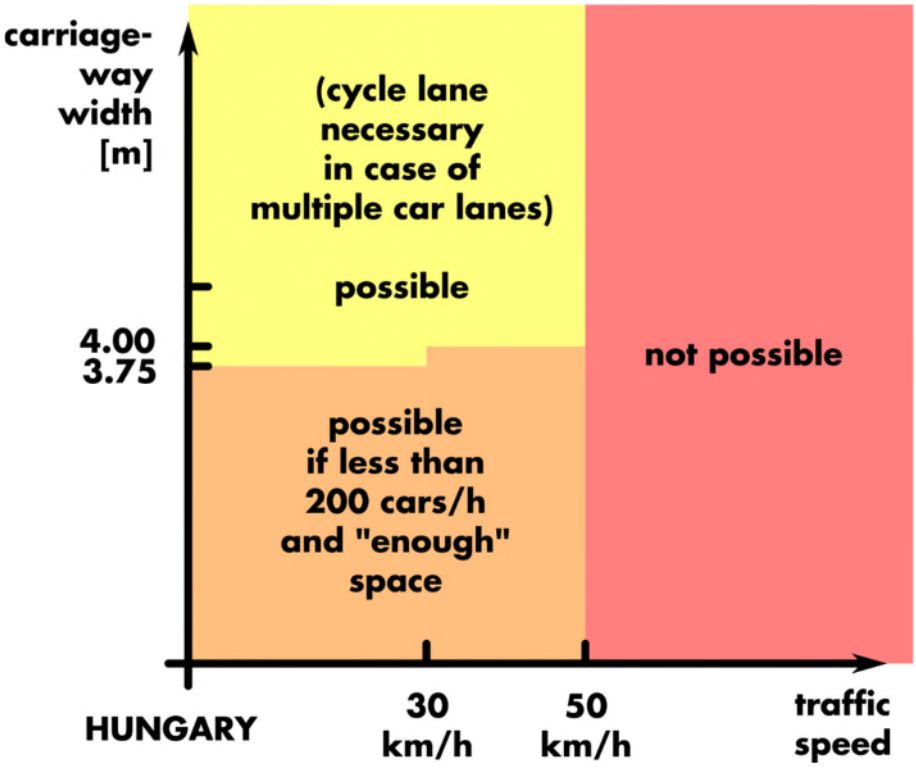
[13] UK prohibits drivers of slow-moving vehicles from holding up a long queue of traffic, but it seems to be interpreted not as strictly as in Croatia.

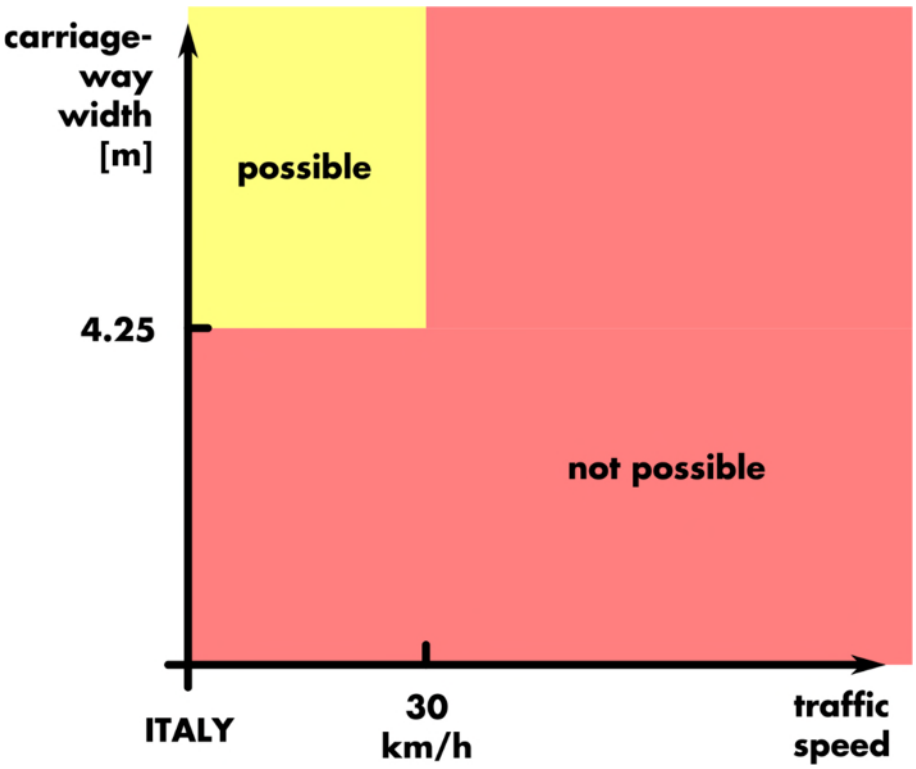
- Additional conditions, encountered in some of the countries, include:
    - specific minimum width of the carriageway: the lowest requirement is set in Belgium (2.60 m) and the highest in Italy (4.25 m);
    - specific maximum volume of motorised traffic, for example 300 cars/h in Luxembourg or 200 cars/h in some cases in Hungary;
    - sight distance, for example in Hungary the road users need to be able to see the other vehicle approaching from the opposite direction from at least 70 m (50 m if the speed is limited to 30 km/h);
    - number of lanes;
    - share of heavy traffic;
    - presence of regular bus lines;
    - gradient.
- Several countries still do not have legal provisions for adding such exceptions (Croatia, Portugal, Slovenia, Spain).
- **Best practice:** Belgian regulations do not only allow, but in many cases oblige the road administration to add exception for cyclists, unless there is a justified reason not to. Only in rare cases when a street with a speed limit above 50 km/h and carriageway width below 3.5 m is contraflow cycling not possible.

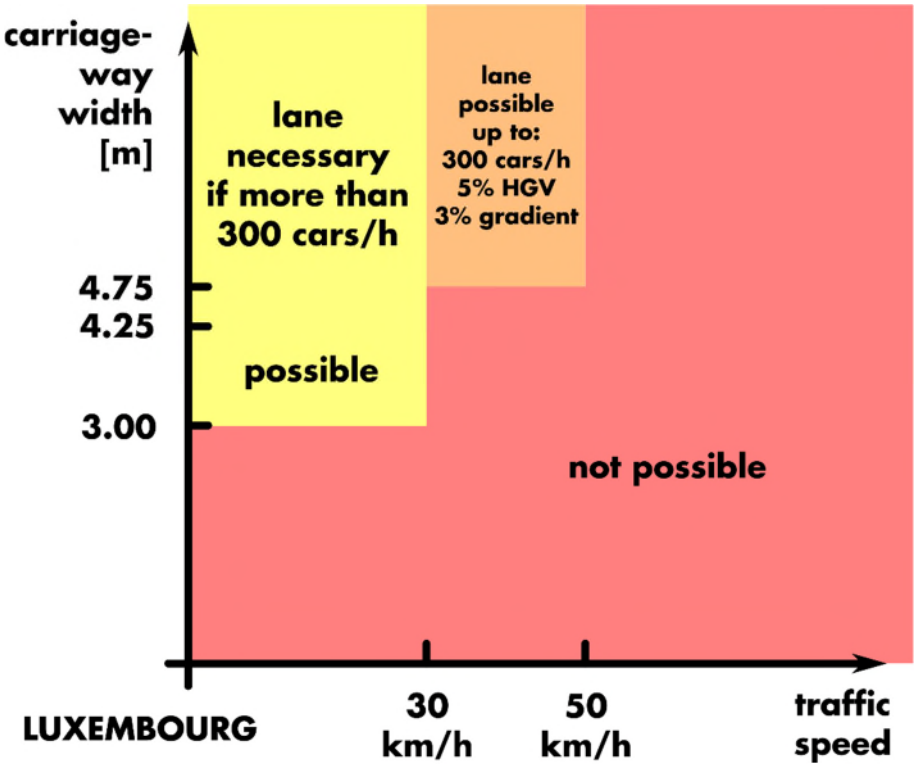
The following graphs present the conditions for introducing contraflow cycling in different countries, either with or without a cycle lane. The graphs focus on carriageway width and speed limit, with other legal conditions included in a simplified manner.

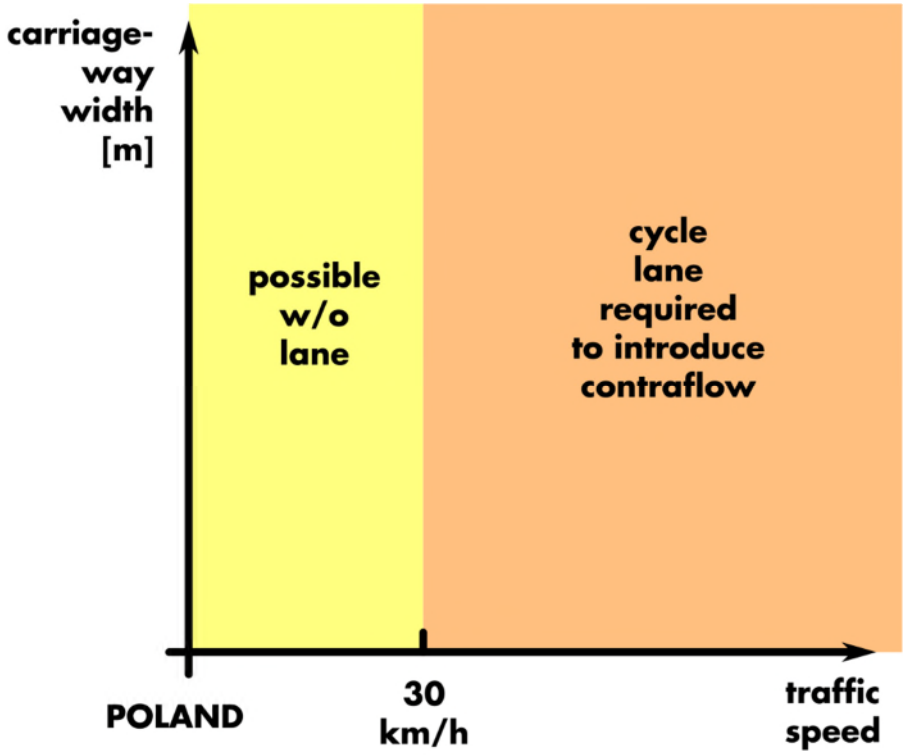








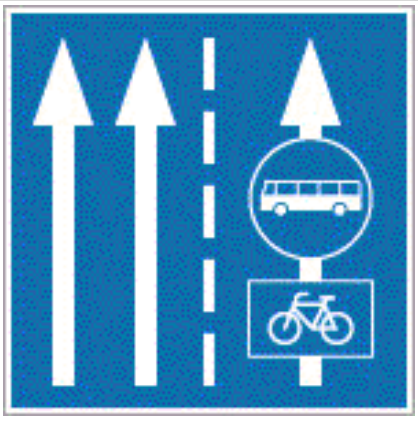




Cycling in bus lanes

None of the analysed legislations gives a blanket permission for cyclists to use the bus lanes, but nearly all of them make it possible to add symbols or exceptions for cyclists to bus lane signs. How often the solution is applied varies from country to country.

Example signs for common bus and cycle lanes

Hungary	Spain	UK
		

- **Best practice:** German administrative regulations address the critical cycling safety issue related to bus lanes, by making it obligatory to include an exception for cyclists if there is no dedicated cycle track or lane and the lack of exception would oblige cyclists to ride between the busses and private cars (VwV-StVO zu Zeichen 245 II.4.)

- Luxembourg also presents a very pragmatic approach, noting that:
    - In locations where there is no separate cycling infrastructure, not allowing cyclists to use the bus lane can create particularly dangerous situations;
    - bus lanes are usually used by fast and experienced cyclists, travelling at speeds similar to busses.

- Italy allows cycling in the bus lane only if the speed is limited to 30 km/h.

- Legal provisions for letting cyclists use bus lanes seem to be missing in Portugal.

- Theoretically cycling can be allowed in bus lanes in Croatia and Slovenia, but this is not used in practice.

It is worth noting that cycling in bus lanes can be combined with non-compulsory cycle tracks or cycling on the sidewalk, in order to cater both for more and less experienced cyclists.

Cycling on the sidewalk

Several countries permit or even oblige children until certain age to cycle on the sidewalks.[14] The legal age limit for cycling on the sidewalk varies as follows:

Max age	Cycling on sidewalk obligatory	Cycling on sidewalk permitted
Not possible at all	Croatia, UK	
8	Germany	
10	Poland[15]	Belgium, Germany, Portugal
13		Luxembourg[16]
?[17]	Italy, Slovenia, Spain?[18]	

As seen in the table, most common age threshold is set at 10 years old.

Several states allow cycling on the sidewalks also in other situations, e.g.:

- When supervising children allowed to cycle on the sidewalk (Germany, Poland);
- If the speed limit on the carriageway is higher than 50 km/h and the sidewalk is at least 2 m wide (Poland);
- In extreme weather conditions (Poland);
- If the carriageway is unfit for cycling traffic (Hungary);[19]
- If cycling on the carriageway is prohibited (Hungary).

[14] On the other hand, Romanian legislation seem to effectively ban children under 14 years old from cycling on any part of public road, both on the carriageway and on the sidewalk: https://ecf.com/sites/ecf.com/files/Cleja.R.and_.Mititean.R_Conflicting_traffic_legislation_for_cyclists_in_Europe.pdf

[15] In Poland children up to 10 years old are considered pedestrians also when cycling.

[16] In Luxembourg children under the age of 13 can play on the sidewalks and children's bikes are considered toys.

[17] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

[18] Ibid.

[19] In practice this covers e.g. permission to cycle on the sidewalk for children.

Austria, Germany and Switzerland allow to authorize cycling on the sidewalk by placing an exception for cyclists under the sign for a pedestrian track. Similar functionality (rights and obligations of road users) is offered by:

- Combined pedestrian and cycle track signs in Italy;
- Non-compulsory cycle/pedestrian and cycle tracks in Belgium, France and Luxembourg.

In all cases, adult cyclists riding on the sidewalks need to give way to pedestrians.

German combination of signs authorizing cycling on the sidewalk. Similar signs exist in Austria and Switzerland.

The regulations can be seen as:

- recognition that the dedicated cycling infrastructure is not (yet) complete and currently of imperfect quality, therefore provisional solutions are sometimes necessary;
- recognition that cyclists are a varied group of road users, and sometimes the same infrastructure cannot address the needs of the whole spectrum (e.g. both children and experienced road cyclists).

Advanced stop lines / bike boxes / bike locks

Many legislations contain provisions for marking an area on an entry arm of a junction that either makes it easier for a cyclist to perform a turn manoeuvre or makes the cyclist more visible to drivers. Provisions for these solutions seem to be missing in Portugal and Spain. Some municipalities experiment with marking them anyway, but it has no legal consequences.

Advanced stop line sign in Belgium

The variety of solutions falling into this category and their signage would require more in-depth and focused analysis. As a starting point, the systematics provided by German administrative regulations can be used, distinguishing:

- advanced stop lines;
- left-turn lanes and "pockets";
- bicycle locks (with separate traffic lights to enter the lock).

Right of way on cycle crossings

While cycle tracks can provide safety by physical separation in between the crossings, cyclists still need to interact with motor vehicles on crossings. Clear regulations for right of way on cycle crossings are critical for the development of dedicated cycle infrastructure. In particular if cyclists have right of way when cycling on the carriageway, but loose it after a parallel cycle track is built, it leads to questioning the sense of construction of cycling infrastructure.

In most frameworks and their practical applications, the right of way on cycle crossings follows the same logic as the right of way for cars:

1. the cycle track along a primary road has right of way over entry arms of minor roads;
2. cyclists going straight have right of way over cars changing direction (e.g. turning left or right from a primary road onto a minor road).

The second principle is to a large degree unified across Europe by the Vienna Convention on Road Traffic, article 16.2:

- Original text:[20]

[20] https://www.unece.org/fileadmin/DAM/trans/conventn/crt1968e.pdf

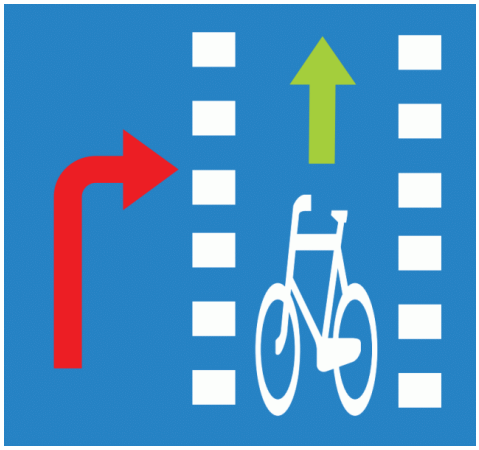
"While changing direction, the driver shall, without prejudice to the provisions of Article 21 of this Convention regarding pedestrians, allow oncoming vehicles on the carriageway he is preparing to leave, and cycles and mopeds moving on cycle tracks crossing the carriageway he is about to enter, to pass."

- Amendments to this entered into force on 28 March 2006:[21]

"While changing direction, the driver shall, without prejudice to the provisions of Article 21 of this Convention regarding pedestrians, **allow road users to pass on the carriageway, or on other parts of the same road he is preparing to leave."**

The change does not affect cycle crossings *per se*, but generalises the principle of priority for road users going straight over road users changing directions from oncoming vehicles and cycle on separate tracks to all possible cases (e.g. also vehicles moving in the same direction on bus or cycle lanes located to the right in case of turning right).

Netherlands: Although the sign has no legal consequences on its own, it serves as an explanation of the principle that turning car should give way to a bicycle going straight. Similar signs were put in a few places in Poland after the national law was harmonized with the Vienna Convention on the Road Traffic.



Several interesting deviations or additions to the basic principles include:

- Germany specifies a concrete distance of 5 m until which the cycle crossing is a part of the junction and the general rules apply; if the crossing is further away, separate signs need to be installed to clarify right of way.
- Rules of road traffic in Spain require motor vehicles to give way to cyclists riding through designated cycle crossings, but the only example provided in the administrative regulations shows a cycle crossing with a yield sign for cyclists.

[21] https://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_traffic_EN.pdf

- In Croatia and Slovenia there is an ongoing debate on the legal relevance of cycle crossings as some national institutions are of the opinion that even when using a clearly marked cycle crossing over a road, cyclists should yield to other road traffic.
- Hungary requires cyclists to stop and yield to cars if the cycle crossing is in between intersections.
- In Belgium different types of cycle crossings exist, with and without priority for cyclists, denoted by different horizontal markings. Interestingly, a double line of squares denotes cycle crossings with no priority for cyclists, opposite to the meaning of similar signs in many other EU Member States. As the difference is not understood by most of the road users (both cyclists and drivers), crossings without priority are less and less used.
- In the Netherlands priority signs are present on nearly all cycle crossings, in order to keep things simple for road users.

Special rules / provisions for left turning for cyclists

Left turning in right-hand traffic (and vice versa, for countries with left side traffic) is a particularly difficult manoeuvre for cyclists on carriageways. They need to signal the turn (taking a hand off the handlebar), weave through faster moving motorised traffic, watching for cars coming from behind and also the opposite direction, all at the same time as paying attention to road surface. The need for special rules for cyclists on this manoeuvre was already recognised in article 16.1. of the Vienna Convention in 1968 and further elaborated in one of the 2006 amendments (text in **bold**):

> "Article 16.1.
>
> Before turning right or left for the purpose of entering another road or entering a property bordering on the road, a driver shall, without prejudice to the provisions of Article 7, paragraph 1, and of Article 14, of this Convention:
>
> [...]
>
> (b) If he wishes to turn off on the other side, and subject to such other provisions as Contracting Parties or subdivisions thereof may enact for cycles and mopeds **enabling them to change direction, for instance by crossing the intersection in two separate stages,** move as closely as possible to the centreline of the carriageway if it is a two-way carriageway or to the edge opposite to the side appropriate to the direction of traffic if it is a one-way carriageway and, if he wishes to enter another two-way road, make his turn so as to enter the carriageway of such other road on the side appropriate to the direction of traffic."

The manoeuvre can be approached in two ways:

- move as close as possible to the centreline of the carriageway if it is a two-way carriageway, or to the edge opposite to the side appropriate to the direction of traffic if it is a one-way carriageway (“car/direct turn”);
- keep close to the edge appropriate to the direction of traffic in order to cross the intersection in two separate stages (“indirect/hook/two-stage turn”.

“Indirect turn for cyclists” sign in Hungary.

Rules vary significantly between countries:

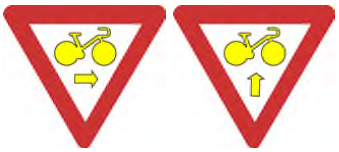
Rules	Countries
Both direct and indirect (hook / two-stage) turn possible on most crossings	Germany
By default, cyclists should turn as cars, but signs might oblige to perform the turn in two stages	Hungary, Luxembourg, Poland, UK (?)
Cyclists always obliged to turn like cars	Croatia, Slovenia, Portugal
Cyclists always obliged to turn like cars, with the exception of interurban roads: if there is no lane specially conditioned for left turns, cyclists are obliged to turn in two stages	Spain
Cyclists are always obliged to turn in two stages	Denmark
Unclear	Belgium, Italy[22]

[22] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

Exemptions from traffic lights for cyclists

In general, traffic lights have traditionally been designed to regulate motor vehicle traffic, either to avoid conflicts between motor vehicles or between motor vehicles and pedestrians. Apart from the few most advanced cycling countries, the majority of traffic lights is not optimised for the flow and safety of cycle traffic, even if dedicated signals for cycle traffic are provided.

Currently, several “climbing” countries are recognising that it might be beneficial to allow cyclists to bypass traffic lights completely. In most cases this is implemented by adding a dedicated sign under the traffic lights, informing in which directions can the cyclist ignore the traffic light. Cyclists crossing on the red light need to yield to perpendicular traffic and pedestrians.

Belgium		Right turn on all crossings; Going straight on T crossings.
Denmark		Right turn only.
France		All directions and combinations possible.
Germany		Right turn only; Only test applications up until now, scheduled for wider use in the next update of the legislation.
Hungary		Currently under discussion.
Luxembourg		Right turn or straight only, requires dedicated traffic light.

Netherlands		Can be a plate or an extra traffic light.

In some cases, the exceptions are added to prioritise cycling, but in many it simply represents a compromise between having traffic lights not suited to cycling and an expensive complete junction reconstruction.

Conclusions

- There are several elements of cycle infrastructure that seems to be rather unified across different Member States – these are the elements defined in the Vienna Convention on Road Traffic (in particular cycle tracks, to a lesser extend cycle lanes and rules of priority on cycle crossings). However, in the 50 years since the adoption of the conventions, new forms of cycle infrastructure have been developed, and for these forms there seems to be some similarities, stemming from a common idea, but the legal regulations vary significantly. For example, road users need to follow a different set of rules on cycle streets in each of the analysed countries. Is it realistic in the current conditions of high international mobility to expect road users to learn and apply the different rules?

- Many countries distinguish between cycle infrastructure/solutions that are compulsory and those that are non-compulsory for cyclists to use. The approach recognises the diversity of cycle users, with different speeds, skill levels and psychophysiological capabilities – e.g. kids still learning to ride, parents travelling with kids, road cyclists, elderly on pedelecs – each of these groups has slightly different needs. Interestingly, it is more often in the legislation of the advanced cycling countries that we find reference to the non-compulsory cycle infrastructure. The countries with lowest levels of cycling and least practical experience seem to believe that wherever there is some form of cycle infrastructure, all types of cyclists should be obliged to use it.

- Several countries are still missing the legislative provisions necessary for optimum use of road space, such as for example contraflow cycling. All of them are countries with low level of cycling, which stays low because of a vicious circle: the types of cycle infrastructure that are allowed by the national legislation require significant financial investments and a lot of space to be taken from other road users, while the existing low number of cyclists does not warrant political will necessary to make such change. On the other hand, countries that improved their legislative framework to accommodate space- and cost-efficient solutions, allowed cities to quickly improve conditions for cycling, which

lead to increase in number of cyclists, and in turn – political will to invest also in “heavier” types of cycling infrastructure.[23]

- The most difficult legislative situation seems to be in Croatia: on one side, the regulations for overtaking discriminate cyclists in mixed traffic and; on the other, a lack of clear priority rules on cycle crossings leads to questioning the sense of providing separated cycling infrastructure.

- Out of the 11 analysed countries, 3 (Germany, Hungary, Italy) are currently in the process of updating their road codes and/or regulations for signs and signals, with regards to cycling infrastructure. Several others either updated their regulations recently or are considering changes basing on pilot projects undertaken by cities or examples from neighbouring countries. Legislative framework for cycling infrastructure is a “hot topic” across the EU and there seems to be lot to gain from an EU level co-operation in this area, to share research, experiences, best practices and avoid reinventing the wheel.

Further research

- Given ECF’s limited time allocation within WP2, a thorough analysis of all relevant legislations has not been possible. The selected countries constitute a sample that illustrates a variety of legislative frameworks across the EU and allows us to draw some preliminary conclusions about their impact on cycling infrastructure, but ECF recommends extending the analysis to all the EU Member States, as well as selected other countries (e.g. Norway, Switzerland and recognised candidates for future membership of the EU).

- An interesting avenue for further research on the subject of cycling legislation in Europe from a comparative perspective could include an in-depth feature on the discrepancies between the rules and guidelines established through national law, and those competences that are delegated to local and regional authorities. The present overview has found that amongst national systems, significant differences in perspective exist between the general laws and guidelines established at the national level and those which are developed at the regional and especially city and municipal level. This may be due to a lack of insight from national legislators as to the “on-the-ground” traffic flow requirements and road conditions that cities and municipalities grapple with on a day-to-day basis. It may also be the case that legislation at the municipal level is better able to adopt new and innovative solutions that may take time to gain recognition through the

23 See e.g. Frederik Depoortere “The role of legislation in Brussels cycling policy”: https://ecf.com/sites/ecf.com/files/Depoortere.F_The_role_of_legislation_in_Brussels_cycling_policy.pdf

hierarchical chain if the legislative process. In any case, further research into the challenges municipal authorities face in adapting road traffic laws and signage to their individual circumstances is warranted.

- Several of the comments received from practitioners consulted indicated that in addition to administrative regulations for signs and signals, barriers for infrastructure development can also be created by how the competences of different authorities are defined. In order to optimise the use of limited road space between different transport modes, governance structures also need to adapt. The optimal cycle routes often need to mix and match streets from different levels of the road administration hierarchy, switch between on- and off-carriageway solutions, sometimes also making shortcuts through parks, along rivers, canal or railroad lines, and users expect consistent standard of infrastructure, wayfinding and maintenance on the whole route.

- In particular, according to Croatian and Slovenian legislations, on certain important roads the carriageway between kerbs, including cycle lanes, is to be developed and maintained by a regional or national road authority, but the pedestrian or cycling tracks along the same road are already in the competence of a municipality. As retrofitting a cycle route along a road often requires changing back and forth from one jurisdiction to another, from on-the-carriageway to a separate road part, this arrangement requires a high level of coordination and mutual permits between road authority bodies and the local municipalities' traffic departments, providing a large additional administrative burden.

- Finally, cycling infrastructure needs a level playing field with roads for cars in terms of land acquisition or environmental procedures. Due to the limited scope of analysis, this was not in its focus, but it seems that while many countries provide a simplified procedure for buying land or acquiring construction permits for new or modernised roads,[24] cycling infrastructure does not enjoy the same privileges. Even in Flanders, which is generally a highly developed cycling region, cycle highways were assigned a status of investments of significant public importance only in 2019.[25] Lack of such provisions leads to suboptimal design choices when municipalities are forced to cater for cyclists in a busy narrow corridor together with car traffic, instead of developing a parallel high quality cycle route.

24 E.g. “Ustawa z dnia 10 kwietnia 2003 r. o szczególnych zasadach przygotowania i realizacji inwestycji w zakresie dróg publicznych” (Parliamentary Act of 10 April 2003 on specific rules for the preparation and implementation of investments in public roads) in Poland, http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20030800721

25 “Minder procedures nodig voor aanleg fietssnelwegen” (Fewer procedures required for constructing bicycle highways), https://www.mobielvlaanderen.be/persberichten/artikel.php?a=1&id=1012

Information about country sheets

The details of each of the analysed countries legislations, including links to relevant legislative acts, are listed in unified form. Insofar as the information provided still requires additional verification, it will be made available by August 2021.

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26 Safer Cycling Advocate Program: https://safercycling.roadsafetyngos.org/

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