SUMPs implementation: designation of capacity gaps of Local Authorities in the delivery of sustainable mobility projects

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Abstract

There are numerous initiatives at European level which aim to increase the capacity of cities with regard to sustainable mobility planning by developing guidelines and various forms of training materials. An important prerequisite for systematic capacity building is to understand what capacity actually means in the context of mobility planning and which concrete factors influence the ability to shape and deliver sustainable mobility solutions. In the SUITS EU project a tool for capacity assessment was developed and tested with 6 participant cities. Through interviews and workshops with mobility stakeholders of the participating cities, 15 challenges that the cities face while planning and implementing mobility plans were identified which led to the design of a set of 54 indicators that assess the capacity of an authority to develop and implement a mobility plan. The presented methodology allows authorities to self-assess their performance and capacity, unveil the sources of the problems they face and that are impeding their effectiveness in developing and implementing mobility plans. The application to the six participating cities demonstrated that the presented evaluation tool is comprehensive, encompasses all the aspects of the environment in which a LA operates and effectively highlights the areas where interventions are required so that the LAs can systematically increase their capacity.

Keywords: mobility plans; sustainability; capacity evaluation; sustainable urban mobility plans (SUMPs); Local Authorities

1 Introduction

In a technological fast-developing world, quality of life has still not achieved universally satisfactory levels. Lower income populations tend to experience restricted accessibility to transport services and consequently fewer professional opportunities (OECD 2011) while vehicle-related pollution and transport safety are still challenging issues for transport planners and regulators (World Bank 2017).
During the last years there has been a great effort to move towards more sustainable cities following the UN Agenda. Goals, planning tools and practices are being diffused worldwide. In this effort, Sustainable Urban Mobility Plans have arisen as a policy tool to enhance sustainable mobility. Several initiatives on the strategic planning of sustainable urban development exist (Sustainable NI 2016;

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Plevnik et al. 2019) and useful tools, criteria and relevant indicators have been proposed among different geographies to assist the application of sustainability plans (Zheng et al. 2013; DSDG-UNHQ 2016; Perra et al. 2017; Alonso et al. 2016; EUROSTAT 2019; Mozos-Blanco et al. 2018, Ali-Toudert et al 2019). To enhance the achievement of these applications, regulators are also contextualizing the monitoring process (RFSC 2015). Cities, as well, have launched initiatives for sustainability monitoring such as the initiative of Local Governments for Sustainability (ICLEI). However, the path from theory to practice is not seamless. The motivation for sustainable plans stems from national or international policies, however the implementation fully relies on local governments and stakeholders (Zoeteman 2013). The provision of technical support, stakeholder engagement, alignment of investments and facilitation of collaborations have been reported as priorities for SUMP implementation (Skoudopoulos et al. 2016). The success of SUMPs is also dependent on the evaluation process employed after the implementation but loose or lack monitoring is a common practice in many cities (Mozos-Blanco et al. 2018).

The Smart City concept is often met in SUMPs and many sustainable mobility measures are often described as smart mobility measures as well. A study in Belgium suggests that depending on the characteristics of the cities, it is likely that the understanding of “smart” differs among LAs and city clusters may emerge according to the city´s size (population), the degree of urbanization (urban, rural) and the region it belongs to (part of the country) (Desdemoustier et al. 2019). Four clusters on “smart” understanding have been suggested: technological (implementation of a technology), societal (a human, sustainable and institutional positioning), comprehensive (an integration of technology, human-centricity, sustainability and institutional factors) and non-existent (absence of understanding). The relevant application in 113 Municipalities in Belgium indicated that the cluster of municipalities without any understanding (non-existent) or with a technical understanding are mostly located in small and rural areas where there is resistance to the application of smart mobility as such projects are considered complicated for their regions and with low expected contribution. The view of project complexity is shared for medium and large-sized municipalities but these clusters mostly develop a societal or comprehensive understanding. This study implies that the city size affects internally the capacity of LAs to correspond to novel concepts without analyzing the views of several stakeholders in each city.

While many studies have focused on the assessment of sustainable urban development and the assessment of SUMPs, the evidence on the capacity of the relevant stakeholders to successfully implement those plans is scarce. As there are differences among traditional transport plans and SUMPs (ELTISplus, 2012), there is the need to analyze the conditions that can lead to the delivery of SUMPs. Early work on the field, focused on the barriers faced by LAs while implementing SUMPs, indicated that financing had been the greatest impediment, followed by modelling techniques, monitoring of the process and the evaluation while the aspects of strategy option generation and strategy appraisal were reported as of less impact (May 2005). The legal aspects, the existence of national guidance, the number of plans in place, the set of sustainability objectives, the level of public involvement, the finance state and the political support can serve as indicators for the status of SUMPs at a European level as well (ELTISplus 2012). A case study for Mexico City revealed that from the perspective of mobility stakeholders, the negotiation success with and among internal transport stakeholders and the cooperation among the political entities in the region are driving forces for the development of sustainable transport systems (Steurer and Bonilla, 2016). Public participation through information sharing and activity communication has also proven to be a contributor to collaborative mobility initiatives and a determinant factor on the successful implementation of plans especially when there is

a stakeholder annual agenda (Gil et al. 2011). The importance of collaborations on data sharing and exploitation has been highlighted by Tafidis et al. (2016) who through the assessment of data availability, frequency and reliability over 80 data types in the city of Thessaloniki underlined the need for the operation of a unique urban observatory.

Local Authorities (LAs) are still dependent on external aspects so that they implement plans towards sustainable mobility. A survey to 328 European cities demonstrated that there is an expressed need for support on the following areas: financing the measures and their development, provide support with guidance and training, define a legal framework that enhances the integration of land and mobility planning, define the institutional framework and organize the monitoring of the process (Plevnik et al. 2019). Another study of narrower context (24 closed responses) designated the lack of a governance framework, the lack of consistency in the legal framework, the understanding of the SUMP concept, the lack of awareness at national level, the compatibility of SUMPs with existing plans and the need for good practice diffusion as major gaps hindering SUMP development at national level (Durlin et al. 2018). Environmental regulations and the provision of public funding are both motivating and forcing LAs to develop and deliver SUMPs. However, they are not always capable of successfully planning and implementing them. In order to assist cities with the implementation of their mobility plans, it is essential to analyze which factors influence their capacity to plan, develop and implement sustainable mobility measures. The current work is studying more meticulously the issue of the capacity of LAs to implement SUMPs, the barriers and the challenges met while applying mobility measures as part of SUMPs. An evaluation process for the capacity of LAs to implement SUMPs is developed in the framework of SUITS-CIVITAS H2020 project. The aim is to understand the gaps and challenges of the cities during the planning or implementation of mobility measures as well as the requirements of cities and mobility planners in terms of support. It presents an evaluation framework and the results of its application to six European cities. The next section of the paper presents the methodology that was followed based on the knowledge acquired on previous work conducted on the field, workshops and interviews with mobility stakeholders of the cities. The results are then presented and they are discussed on the fourth section. The paper concludes with some conclusions made on the results of the assessment.

2 Method

Understanding the way in which a LA works requires thorough understanding of its structure, planning, operations and relationships to other stakeholders. The nature of capacity assessment, in the context of transport planning, concerns organizational and behavioural aspects of the stakeholders involved. The prerequisite for supporting the capacity of cities to implement sustainable mobility measures is a clear understanding of what capacity actually is and how it is reflected in the planning and development of mobility measures. The multifaceted nature of sustainability and the numerous stakeholders involved in this process increase the complexity of capacity assessment. According to OECD, capacity is the ability of people, organizations and society to manage their affairs successfully. The European Commission (2014) defines capacity building as a process that invests on the ability of LAs to perform its functions which can be improved by focusing on both the individuals and the entities. At the level of individuals, skills and competences need to be developed inside the public authorities, and at the level of entities, processes, structures and resources are the focal points to assess. In this study, capacity is defined as a process through which a transport organization or institution responsible for transport planning and management at the urban level is able to develop and implement various transport projects with short or long-term objectives, with the final aim to enhance integrated transport systems

in a sustainable way (Martins et al., 2017). To assess the activities of a LA to build its capacity, the views of organizational, political, legal and societal players are considered. Transport and mobility departments of LAs, transport authorities and operators, mobility agencies, infrastructure providers and transport users, citizens representatives and funding agencies give feedback on the LA´s capacity to implement mobility plans. The following methods can be employed for the collection of the data and information that will be analyzed in order to complete the assessment: workshops, focus groups, interviews and self-assessment. In this study workshops and interviews with the mobility planning departments or the departments that are involved into mobility planning of nine LAs were conducted and a self-assessment capacity tool is presented.

2.1 Arising challenges for SUMP implementation

An important focus of the work with the cities was to better understand the challenges cities face when planning and implementing mobility measures. This understanding provided an important basis for the development of support materials such as guidelines and webinars in the project, and secondly, it formed a basis for the organizational change process that was carried out with the participating cities as an example. The challenges were derived from the work with nine European cities in different workshops and through interviews with mobility planners of the local authorities. The main goal was to understand their general knowledge interest when planning and implementing mobility solutions, their experiences with a focus on occurring problems, barriers and enablers as well as their requirements for support and training materials. Table 1 presents 15 challenges derived from the workshops that every city copes with when shaping sustainable urban mobility. Depending on the kind of the mobility measure, the capacity of the mobility department and the local context, individual challenges can have a higher or lower importance. Overall, larger cities are usually better situated than smaller ones. The large number of staff makes it possible to build up a wide range of knowledge and expertise.

Table 1: Description of cities´ challenges in SUMP implementation process

Challenge area		Challenge description
1	Sustainability Thinking	Shaping sustainable mobility requires sustainability thinking among the staff and those who are involved in the process. Anchoring a sustainable mindset is one of the biggest challenges for local authorities, as this cannot dictate by leadership, rather it is a way of looking onto things that need to develop gradually. The LA must always provide impulses and constantly raise awareness of the issue.
2	Institutional cooperation	The challenge illustrates the need to improve the cooperation between local and regional authorities and decision-makers who are directly and indirectly involved in the development of sustainable mobility measures. The aim is to motivate the various municipal departments to develop a common vision, to participate and to commit to projects.
3	Systematic staff deployment and –development	In recent years, the field of mobility has become increasingly broad, complex and difficult to penetrate. Although an incredibly large pool of knowledge and experience is available in general, mobility departments often lack the capacity to develop their own technical know-how in all mobility areas. A major challenge is to develop the needed competencies among the staff systematically with a view to the long-term, ideally in such a way that synergy effects between the projects can be exploited.
4	Project management and monitoring	Effective and efficient project management forms the basis for successful projects. This aspect is still a big barrier and often leads to serious delays or even the failure of mobility projects. This challenge is to critically backlight and optimize project management and monitoring processes.
5	Knowledge management and transfer	Shaping mobility depends to a large extent on experience. The challenge is to enhance and establish a sustainable process for knowledge management/knowledge transfer among mobility departments and

		stakeholders. The aim is to apply and try out established methods in order to learn from own experiences and from those of others. It is about to apply these findings to new projects and to transmit them to new employees.
6	Understanding and applying innovative financing	The challenge is to increase the ability to identify funding sources and to use innovative financing methods. This requires capacity to identify, evaluate, adapt and apply financing methods for projects for which there is no funding available or urban funds are insufficient.
7	Innovative procurement	The challenge is to integrate sustainability criteria and requirements to procurement processes and sensitize procurement agents to sustainability aspects and opportunities arising from the procurement reform.
8	Understanding political interests & decision-making	No matter how well planned a measure may be, without political backing, it will not be implemented. The challenge is to increase the capacity to assess political moods and to affect political bodies through evidence and argument.
9	Understanding legal and regulatory framework	As many policy areas are directly or indirectly affected by the development of mobility measures, various legal and regulatory frameworks need to be considered. Some of these regulations also may change over time. The challenge is to further develop strategies and skills, to access the legal framework conditions and to take them into account for planning and implementation of mobility measures.
10	Citizen participation	The challenge is to increase the capacity to identify and actively involve citizens in the development process of measures and strategies. This requires a precise understanding of benefits and concrete methods of citizen participation. Citizens need to be informed about measures, goals and backgrounds in order to engage with the measures.
11	Estimating the feasibility and acceptance of measures	It is particularly difficult to obtain the necessary political support for innovative measures when there is a lack of experience and a high degree of uncertainty in terms of feasibility and acceptance. The challenge is to use methods to try out innovative measures in a scaled version, in a closed system beforehand in order to gain a better understanding for upcoming problems and to be able to make predictions for workability and acceptance.
12	Interaction and cooperation with business partners	The interaction and cooperation with business partners has become increasingly important in order to implement new mobility services (eg. sharing services). The challenge is to combine new offers with existing services, adapt them to the local characteristics and make them attractive to citizens. The conditions must be attractive for providers to offer such services in the city. Close cooperation with business partners is a key factor.
13	Identification and utilization of synergy effects	The challenge is to early identify connections and dependencies between mobility strategies and measures or between different mobility services.
14	Use of innovative technologies and data collection methods	The challenge for the cities and the mobility departments is to raise awareness of technologies, tools and methods for the effective and efficient collection and evaluation of data and it´s use for the planning, implementation and evaluation of mobility measures. It is also a matter of looking across other departments to see who is already collecting certain data, or who might still be interested in certain data. Multiple use of the data and the exploitation of synergy effects is particularly important.
15	Application of research knowledge and adaption of Good Practice examples	The challenge is about a greater application of research findings and knowledge. It is also about a better understanding of the transferability of good practice examples. The identification and understanding of contextual factors that are relevant to the success or failure of measures is challenging and that must be taken into account when trying to adapt measures to the specific conditions of a city.

2.2 Capacity assessment framework

The capacity assessment aims to evaluate the performance and identify the potential for capacity building. Based on the retrieved information of the interviews and the workshops, a set of indicators is composed in order to assess and reveal possible inefficiencies in all the elements that form the capacity.

They describe the range of activities that will lead to efficient and successful development and implementation of sustainable plans. The proposed set of indicators assesses the current operations of the institution in 4 main areas (organizational, political, legal and societal) and 4 subareas (communicational, financial, managerial and technical) related to the environment in which the authority exists and operates. They measure the inputs, the processes, the outputs and the outcomes of an organization. The key composites of each of these categories are presented in Table 2 below.

Table 2. Description of self-assessment indicators

ORGANIZATIONAL	
Indicator´s name	**Indicator´s description**
Subcategory: Coordination/Cooperation	
Cooperation	Level of collaboration among the LA and the organizations that participate in all stages of planning and implementation of a plan (financing, procurement of products and services, Public Private Partnerships)
Decision-makers	Number of policy-makers involved in planning and implementation.
Operational autonomy	Organization's autonomy to implement plans independently of other stakeholders' approval.
Financial autonomy	Financial independence from central government and other financial agents.
Inter-departmental cooperation	Level and frequency of cooperation and networking between the involved departments inside the same organization.
Subcategory: Process	
Implementation rate	Number of implemented or planned measures.
Monitoring	Project management activities to control technical and processual issues.
Punctuality	Rate of compliance with deadlines under clear milestones' identification.
Budget management	Ability to realistically include plans/measures in the organization's budget.
Progress Control	Regular process evaluations to determine gaps and flaws in the Plan's workflow execution, avoiding delays and redundant work repetition.
Risk awareness	Frequency of identification and assessment of possible risks that may appear during all the project´s lifetime.
Adaptability/ Contingency Plans	Capacity to adjust plans/measures in reaction to an extraordinary event. Existence of Risk Control measures defined to control the impact of the risks that affect the project.
Process learning	Organization's acknowledgement of internalizing past experiences, both positive and negative, to solve present/ future issues that may arise.
Subcategory: Financial sources	
Financial sources	Efficient use of national/ international, public/private investment sources.
Understanding (IF) Innovative Financing	An understanding of the benefits that innovative financing methods have on the financial capacity of the organization.
Identification of IF	Ability to identify innovative financing opportunities.
Training of IF	Number of people in the organization who are trained in innovative financing.
Use of IF	Organization's employment of innovative financing resources.
IF & local economy	Economic status of city increased through projects funded by innovative finance.
Innovative business model	Organization's development of Innovative Business Models in the projects developed/ implemented.
Subcategory: Technical/Data resource	
Logistical resources	Available resources' quantity/quality needed to properly complete the tasks required for planning & implementation. Easy access to logistical tools.
Communication resources	Available resources' quantity/quality needed to properly complete the tasks required for planning & implementation. Easy access to communication tools.
Technological resources	Available resources' quantity/ quality needed to properly complete the tasks required for planning and implementation. Easy access to technological tools.
Use of new technologies	Willingness to use new technologies and familiarity with their application for data collection
Data availability	Availability of the necessary data required to complete all project's tasks.
Data collection	Availability of necessary tools, networks and resources to efficiently collect data from diverse sources and in different formats.

Data analysis	Availability of the necessary tools, networks and capabilities needed to efficiently analyze data collected of diverse sources and formats.
Data sharing	Be able to retrieve valuable information as an output from the data analysis. Quantity and quality of data shared among departments (paper-form, electronic, etc.)
Subcategory: Human resources	
Staff's commitment	Staff´s alignment, in attitude and performance, with the goals of the organization.
Realistic goals and priorities	Link between managers' notion of her team's capacity, and the real team's capacity to deliver the expected outputs.
Participatory management	Level of bidirectional communication between different management levels of the organization. Global knowledge increment.
Effective delegation	Each member of the organization has a clear vision of her participation and responsibilities for the successful completion of the Plans. Clear understanding of one's role and participatory timeline.
Team's trust in processes/ tools	All staff involved in the Plans' planning and implementation phases feels completely comfortable with the tools and methodologies needed to successfully carry on all projects' tasks.
Early engagement	Everyone participating in the project is involved since the beginning allowing all stakeholders to have a full view of all the process.
Team's dimension	Human resources available to complete all the project´s tasks.
Team's skills	Knowledge, competences and abilities of the team to meet project's needs.
Supporting resources	Responsiveness to operational/process inefficiencies.
Subcategory: Working environment	
Regular assessment/ self-assessment	Identification of strengths and weaknesses of each member of the team.
Staff's needs	Team's members needs are encouraged to be exposed inside the organization.
Continuous learning	Permanent effort in keeping the staff updated regarding tools and techniques that would assist the project. Includes the level of evolvement in workshops, seminars, conferences, etc.
Turnover rate	Reflects the stability in the composition of the team.
POLITICAL	
Political commitment	Defines how the project will be led and if it is a priority in the political agenda.
Coordinated institutional agendas	Consistency in national/ regional/ local priorities. Correspondence between the Plan and the national political agenda.
Coordination/ cooperation	Effective networking between the national departments of Transport, Land use, Mobility, Energy, etc
Continuity	Commitment to the continuation of the project independently of the authorities elected; the plan is maintained unimpeded when moving from one political framework to the next one elected.
Financing	Existence of financial programs within the National General Budget to undertake the implementation of the Plan.
LEGAL	
Legal and regulatory framework	Contribution of legal and regulatory frameworks to efficient decision-making processes.
Legal power delegation	Organization´s autonomy to solve its own legal issues regarding the planning and implementation of the projects.
Understanding of applied legal framework	All applicable legal framework should be clearly understood by all the involved stakeholders.
Procurement decision criterions	Way of using decision criteria in the public procurement procedure (price, fuel etc)
SOCIETAL	
Public awareness	Use of communication channels related to the project, its design, implementation and impact included.
Public participation	Actions taken to engage people in the development of the project.

Public acceptance	Level of willingness to support and engage with the implementation.
Media reaction	Responsiveness of social media

Each indicator can be assessed for both the LA´s performance level on it and the importance it is attributed to the LA´s capacity. To assess the performance, the respondents indicate the frequency with which actions are taken in what the indicator´s content is concerned. Appendix 1 illustrates an example of how the assessment of an indicator is presented to the stakeholders during the assessment process. The design is intended to be user-friendly to enhance the response rate. This proposed process allows the designation of four clusters of indicators: those that have high performance level and high importance (HH), those with high performance and low importance (HL), those with low performance and high importance (LH) and those with low performance and low importance (LL). The indicators that fall into the HH and HL areas comprise the set of strengths of the city while the LH and LL areas encompass the weaknesses of the city. More specifically, the indicators of the HH area can be considered as the opportunities of the city, the capacity enablers, and the indicators of the LH area entail the barriers of the city that do not favour the implementation of plans. It is deduced that this is an area in which attention should be paid so that capacity improvements are achieved.

3 Results

Six European medium-sized cities were analyzed in their capacity to implement sustainable mobility plans. In total, twelve local organizations (operators, regulators and all the city LAs) were interviewed. At a city level, all the indicators were assessed individually and per category allowing an easy assessment of the performance on each indicator. When several institutions assess a city's capacity, comparisons can be made on the perceptions of the stakeholders (example in Appendix 2). All the clusters of indicators can be aggregated in one graph (example in Appendix 3) to illustrate the results of the analysis for a specific city. The highlighted LH cluster area encompasses the indicators that are considered as important but were attributed low scores and represent the city´s capacity barriers.
Observation of the city results indicate that there are some indicators that demonstrate a common need for strengthening among the cities. These aspects represent internal processes (monitoring), the working environment (staff needs and self-assessment), cooperation with other organizations and alignment with external aspects, specifically the legal framework (legal and regulatory framework, legal power delegation and understanding of applied framework). The aggregated results (Appendix 4) demonstrate that that there are indicators to improve which are dependent on the LA´s operation which are more controllable than others such as regular self-assessment, staff´s needs, participatory management, support tools/techniques and personnel, team´s dimension and continuous learning, coordination and cooperation among sectors, staff´s commitment, data analysis, data collection and early engagement. Others such as financial autonomy, political commitment, continuity, data availability, public acceptance are more difficult to be managed and reach a satisfactory rate of performance. This is mainly observed due to the impact of the external factors that are linked to the operation of a LA and the interdependencies among all the entities. For example, it is easier to control, during a certain period of time, the internal human resources, their expertise and the organization of the work to be delivered than guaranteeing political continuity and financial inputs that mainly depend on the priorities each political entity sets during its governance period.

4 Discussion

The results of the individual cities are used to assess LAs´ capacity, designate capacity enablers and

barriers and derive recommendations for action for the capacity building activities. Overall the awareness of the legal framework was very high, especially in the municipality respondents, as it forms the basis of the work on the mobility measures. However, slightly more than 20% of the respondents were not fully aware, which can be explained by the fact that mobility stakeholders also took part in the survey, often not knowing the legal framework in too much detail. Results on financial autonomy vary; larger cities in economically strong regions are much more independent of federal funding than smaller cities in structurally weak regions. The two indicators Continuity and Staffs needs also show very different assessments. Looking at the point Continuity, in the workshops it became clear that some cities are struggling a lot with political instabilities, which makes it hard to develop and follow long term strategies in the mobility sector. Staff needs also shows that when it comes to the needs of employees, very different situations exist in municipal administrations, like those in private sector companies.
The study indicates that there is room for improvements in the operations of the LAs through the early alignment with the legal framework, the focus on staff operations and the increase of cooperation with other organizations. Improvements could be achieved through the early participation of LAs in the legal framework formulation and increase of project management skills of LA´s staff. The results are aligned with previous research conclusions on the areas of interventions (Skoudopoulos et al. 2016; Mozos-Blanco et al. 2018). Overall the results reflect a good performance, which is a sign that the topic of mobility is being taken very seriously, at least in the participating cities. However, as the results are based on a relatively small sample cannot be generalized.

5 Conclusion

This paper deals with the capacity of LAs to develop and implement sustainable mobility plans. A capacity assessment method consisting of a set of indicators is presented and applied to a small sample of European cities in the framework of SUITS project. The presented methodology allows authorities to self-assess their performance and capacity, unveil the sources of the problems they face and that impede their effectiveness in developing and implementing mobility plans. The application of the assessment tool designates the areas in which interventions are needed in order to enhance the achievement of more successful development and efficient implementation of transportation plans. The application to six cities demonstrated that the priority areas that need interventions so that capacity is enhanced are project management, staff-related and legal aspects. As LAs are multifaceted entities, further interviews with several departments (eg. finance, political) can be taken in order to identify the differences in their perceptions of capacity. Future work can also apply the framework for the systematic development of training tools and the comparison of ex and post assessment of LA capacity.

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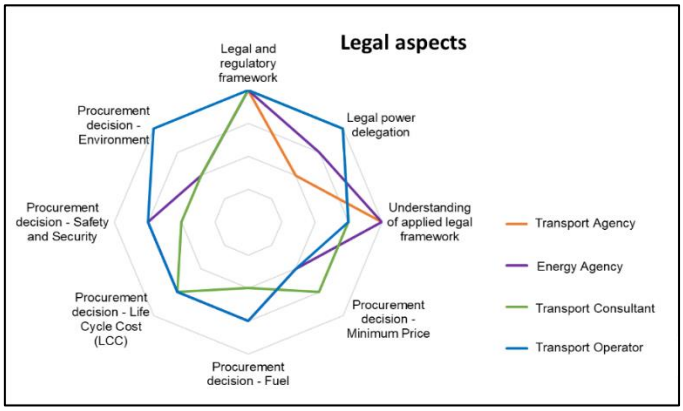
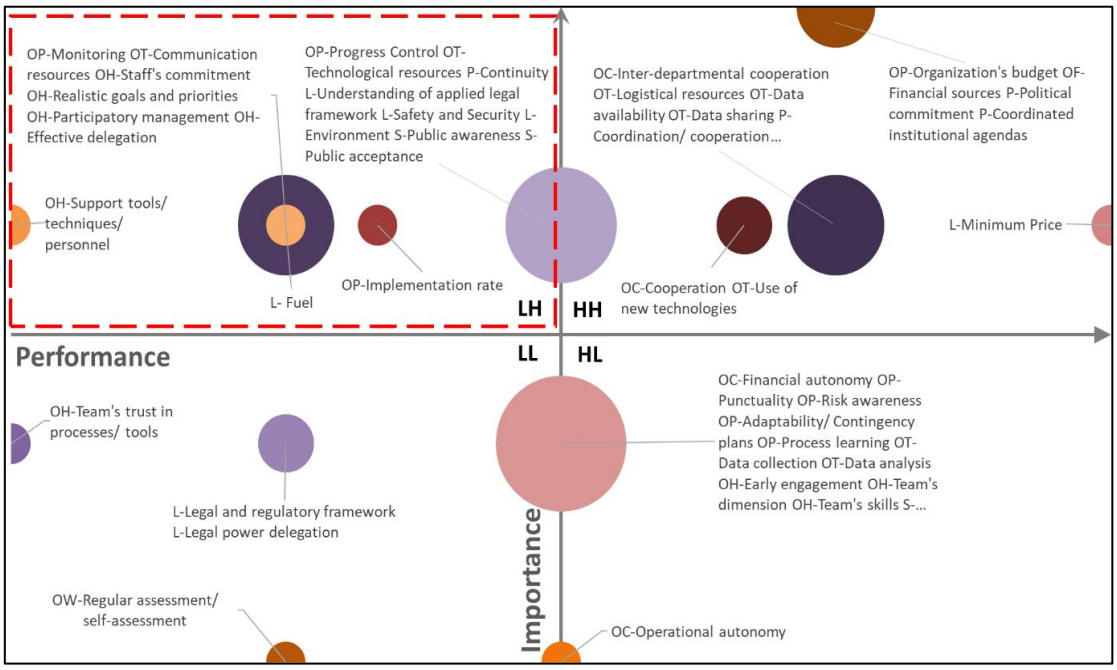
Appendix 1 - Sample from the Capacity Indicators Assessment Survey

Indicator O1	**Cooperation**	
Category	Organizational	
Sub-categories	Financing/Management	
Definition	Level of collaboration among the LA and the organizations that participate in all stages of planning and implementation of a plan (financing, procurement of products and services, Public Private Partnerships)	
Context and Relevance	Assesses the model and level of cooperation between LA and the other participant organizations.	
Assessment	High, Medium, Low, Insignificant	
Importance		(0 – 100)

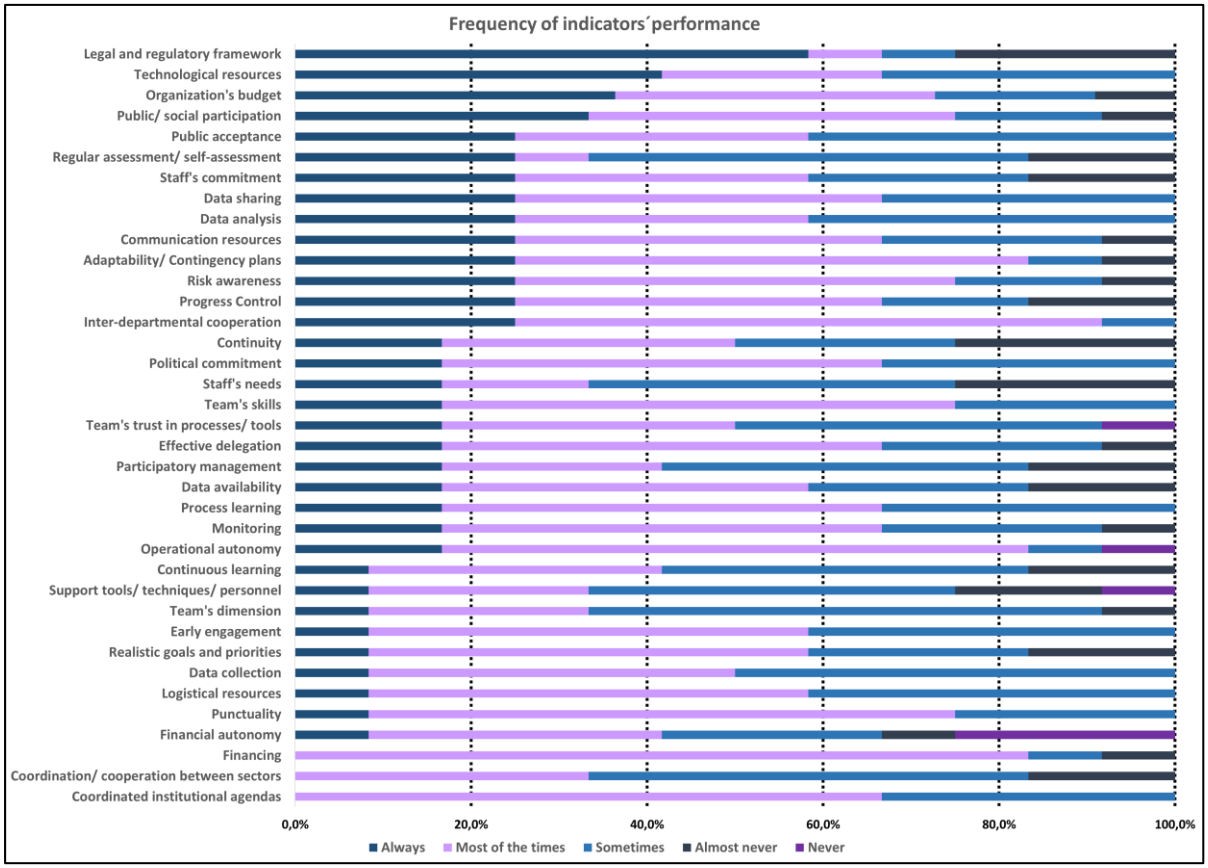
Appendix 2 - Example on Capacity Indicator Assessment on Legal Aspects



Appendix 3 - Example of the cluster indicators of a city



Appendix 4 - Aggregated results on the frequency of performance indicators



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