

Addressing key challenges of sustainable urban mobility planning



Various local case examples in Europe prove the tremendous effects transforming urban mobility can have on a city's environment, public realm and quality of life. Sometimes, pictures are worth a thousand words...



Krakow, Poland



Images: City of Ghent

Ghent, Belgium





Budapest, Hungary



Brno, Czech Republic



Krakow, Poland

Images: City of Krakow



Sustainable urban mobility planning in Europe

Transforming transport in Europe

Planning sustainable and effective transport systems for Europe is fundamental to future growth. More strategic and effective planning approaches are required to transform the currently energy- and carbon-intensive transport systems into sustainable, functional, resilient and competitive urban areas. The need for a more integrated, collaborative planning culture has placed new and also more complex demands on planning authorities across Europe. Cities are facing unique local challenges and present a variety of contextual differences - it is the overall aim to take sound and sustainable policy decisions that unites them. Decisions that create vibrant urban landscapes, promote economic growth, foster social and cultural exchange, and offer residents the highest possible quality of life. Urban mobility is one of the cornerstones to achieve these aims.

Planning sustainable and effective transport

A Sustainable Urban Mobility Plan (SUMP) is a strategic planning instrument for local authorities, fostering the balanced development and integration of all transport modes while encouraging a shift towards more sustainable modes. A SUMP aims to solve urban transport problems and contribute to reaching local and higher-level objectives for environmental, social and economic development. Conducting effective and efficient integrated

planning processes creates the basis for the transition to a more sustainable transport system. Transport planners who need to develop a SUMP are looking for methods and approaches most appropriate in their given context.

Facing the challenges of sustainable urban mobility planning

This brochure gives information on the principal barriers planning authorities face in the context of sustainable urban mobility planning and presents potential approaches and solutions for successful SUMP development: actively engaging people and stakeholders in the SUMP development and implementation process; encouraging cooperation among institutional actors and addressing transport's interconnection with other aspects of urban life; selecting the most effective packages of measures from a wide range of sustainable mobility policies available; and finally, strengthening plan delivery through comprehensive monitoring and evaluation of SUMP measures and processes. There is no one-size-fits-all solution to increasing the number of SUMPs prepared, due to the great variety of local planning practices and contextual conditions in Europe. CH4LLENGE's pilot projects serve as local case examples in this brochure, which provide practical advice and approaches adapted to the different contextual conditions. The final sections direct the reader to learning opportunities and SUMP resources developed in CH4LLENGE, which aim to help planning authorities to prepare and carry out high-quality SUMP processes.



Image: BKK Centre for Budapest Transport



CH4LLENGE key facts and lessons learnt



• 8 SUMP expert organisations

- 9 partner cities
- 12 pilot schemes
- more than 50 local activities
- 175 institutional actors and 290 stakeholders involved
- dialogue established with 15.000 citizens
- 250 transport planners trained in workshops
- 220 students trained in CH4LLENGE Universities

Image: A. Dragutescu

In the EU-funded CH4LLENGE project (2013-2016), nine European cities and eight supporting organisations teamed up to support mobility practitioners in improving local transport planning processes and conducting quality SUMP preparation.

The concept of SUMP has become an essential planning instrument for sustainable mobility over the last decade in Europe. However, despite a strong policy push from the European Commission and other EU institutions, and the development of resources in various projects like CHALLENGE, the concept cannot be considered an established approach followed by the majority of planning authorities yet. Preparing a SUMP in cities can be a complex task requiring a high degree of integration and collaboration between various departments and public and private transport network owners and operators and a political commitment to work proactively with local and regional stakeholders as well as citizens. The skills needed are wider than the traditional engineering base and appropriately skilled professionals are often in short supply. There is also often a lack of understanding of what will work well in a particular context and of effective monitoring of the performance of SUMPs. For a wider SUMP take-up specific guidance is still required. Further support should target adapting existing SUMP guidance to specific types of cities, such as small and mediumsized cities, metropolitan areas, austerity-hit cities and peripheral cities, implementation of SUMPs as well as specific thematic challenges (e.g. freight, clean vehicles, nonmotorised modes, intermodality) for urban mobility.

The CH4LLENGE Consortium consisted of the following partners: Rupprecht Consult, Institute for Transport Studies, University of Leeds, Politehnica University of Timisoara, Urban Planning Institute of the Republic of Slovenia, The Association for Urban Transition, Polis network, Union of the Baltic Cities, FGM-AMOR, Cities of Amiens, Brno, Dresden, Ghent, Krakow, Timisoara, Zagreb, West Yorkshire Combined Authority, BKK Centre for Budapest Transport.



Actively engaging citizens and stakeholders in the development of SUMPs

Planning authorities need to reject a "decide, announce, defend" approach and open up urban mobility development for debate.

Collaborative planning with stakeholders and citizens

A transition towards sustainable mobility requires active support from the public and stakeholders if successful, viable strategies are to be found. While stakeholders usually represent positions of organised groups and have a collective interest, citizens are individual members of the public and unaffiliated participants in the involvement process. A dialogue-based participation process is crucial for example, for analysing mobility problems, developing common objectives, and selecting mobility measures. The engagement of citizens and stakeholders can create a positive foundation for collaborative planning, improve the knowledge base, consider new ideas and opinions and increase the overall quality and credibility of decision making. Whether those benefits can be achieved depends on how the participation process is actually conducted. If stakeholders and the public are engaged properly, participation has the potential to increase the quality of the plan. It also increases the probability of finding agreements and compromises which all participants find acceptable. Participation does not automatically lead to agreement among stakeholders; on the contrary, disagreements need to be accommodated in the decision making process.

Open up for debate

Stakeholder involvement and citizen participation practices in transport planning do vary across



Image: Participant groups in SUMP development Rupprecht Consult, 2016

European countries and between cities. Even if countries have formal, mandatory consultation procedures for medium and large scale transport projects, participation for SUMP is still a novel task for many cities, as participation in SUMP development goes beyond the traditional approach of public meetings and one-way communication. Planning authorities need to open up urban mobility development for debate, which means in practical terms to integrate participation activities into the management of the planning process, to allocate resources in terms of budget and staff time as well as to develop a communication strategy. Various skills and substantial know-how are needed to





Image: City of Dresden

plan and carry out participation, which have to be coordinated with other SUMP-related activities, and inputs from citizens and stakeholders need to be fed back into technical planning and political decision making. For both sides, the planning authorities and the participants, participatory planning needs time and practice.

Embrace participation

There is no standardised procedure for when and how participation should take place in the SUMP process. However, there are various opportunities to engage with stakeholders, citizens or both. Each planning authority needs to find its own approach and define the stages as well as the intensity of involvement that is appropriate to its local context. In principal, engagement that comes too late bears the risk that certain elements of the plan are fixed and possibilities for modification are limited. Ideally, citizens and stakeholders should be actively involved in the development of the core elements of the SUMP (e.g. policy scenarios, vision, objectives and measure packages). As a minimum requirement, the planning authority should discuss the core SUMP elements with a representative group of key stakeholders and give other stakeholders and the public the opportunity to provide feedback.

Reach-out for transparency

An engagement strategy is a helpful document which can facilitate coordination and provides transparency about the participation process and its objectives among participants and the different departments of the administration involved. Depending on the level of experience with participation, it might be helpful to call in an external expert with participation skills to jointly define a well thought-out framework for engagement.



Image: City of Ghent



Using multiple formats for maximum outreach

Ghent, Belgium



Image: City of Ghent

Applying a mixed method approach in SUMP development

When the City of Ghent prepared its new SUMP, it decided to take its participation activities to the next level for both the entire SUMP process but also for the concept and design of individual measures. After the city administration developed a first draft of the mobility plan, several engagement formats were applied: public debate evenings where citizens discussed the draft SUMP. quided by a facilitator; the SUMP debates were followed by an extensive consultation round with stakeholders, which included individual meetings with e.g. NGOs, traffic companies, unions, real estate agents and minority groups; and a parallel one-month public inquiry process that allowed every citizen and organisation to send comments, questions or complaints concerning the SUMP.

Developing detailed specifications of policy measures

CHALLENGE PILOTS

In addition, participation processes were organised for individual SUMP measures. This included, for example, a participatory media campaign and several information and debate evenings on the city-wide traffic circulation plan. Debate evenings and an 'infomarket' were also organised to deliberate on parking policies.

This was the most extensive participation process Ghent had carried out so far in mobility planning. Using multiple engagement formats allowed the SUMP team to reach people from various backgrounds and ages, and strengthened public support for the mobility plan and its measures.

Creating momentum for a new participation culture

Brno, Czech Republic

and stakeholders. Participation activities included the establishment of four SUMP working groups engaging 65 stakeholders and volunteering citizens. Mobility visions were developed together with more than 50 transport experts in a dedicated visiondevelopment workshop. Further, various local and regional institutions were closely involved in developing the mobility plan's analytical part. In total, the city administration received more than 500 comments on the SUMP's analytical part. which were all reviewed and incorporated, where appropriate. Eventually, the City of Brno was even invited to contribute their freshly gained SUMP experiences to the preparation of a Czech national methodology for SUMP development.

Establishing a citizen advisory board

Amiens, France

PAR L'AVIS CITOYEN

Involving a representative group of inhabitants

RECOMMANDÉ

Amiens applied a citizen workshop technique when renewing their SUMP in order to gain in-depth opinions from citizens. A random sample of inhabitants, representing different places of residence, ages, socio-economic profiles and mobility behaviours, was invited to participate. Several interactive citizen workshops were held. The final output was a formulated collective opinion on concrete mobility actions to help build the SUMP action plan. Measures proposed by the group of citizens were labelled as such in the plan.



Creating a participation

framework



For elaborating the analytical part of the

city's first SUMP, Brno prepared a detailed

communication strategy and set up an

interactive online platform for its citizens









Functional cooperationSpatial cooperationInterdepartmental cooperation

Vertical cooperationPolitical cooperationInter-modal cooperation

Get prepared for institutional cooperation

Institutional cooperation is a fundamental requirement to produce a SUMP, which creates ownership among institutional stakeholders, helps to attract funding for measure implementation and is supported by the public. Cooperation of institutional stakeholders could also help to positively influence the long-term development of the transport network and infrastructure towards sustainable mobility. Typical actors for SUMP cooperation are other departments within the local authority (e.g. environment, land use, health), municipal agencies, political bodies, neighbouring communities and higher-level authorities. As there is no pre-defined list or ideal number of institutions, the selection of organisations is a process which has to be carried out within the specific local context. It can take into account both the existing institutional environment and the specific needs at the local scale. In several European Union member states, the development process has specific legal requirements. In these countries, the involvement of a particular type of partner may be obligatory. Also existing internal rules at the city level may determine the approach taken.

Cope with complexity

Institutional cooperation is a topic to be treated with care and is a certain challenge for many planning authorities. A lack of expertise in multi-stakeholder project management, incompatible timeframes and



Image: BKK Centre for Budapest Transport

variances in transport planning approaches can add to the complexity. Accommodating conflicting views is a necessary but sensitive task to undertake. In addition, each local authority has to develop its own cooperation framework taking into account local structures and resources and respecting legal cooperation duties.

Establish responsibilities

It is crucial to appoint a team or a person within the city administration who is in charge of managing the entire SUMP process and partnership. As SUMP development can be considered as a project, the project management should have the right set of skills such as management control or negotiation skills. They should also know when and how to use relevant management tools, for example implementation plans or progress reports.





Image: Marie Schmerková, City of Brno

Identify your partners

At the beginning of the SUMP process it is important to define who will be invited for the SUMP partnership. The project management should ensure that partners represent the whole functional area and together have the necessary skills and competences for elaborating and implementing the SUMP. A successful partnership should have competencies in the SUMP area's transport networks and services, provide the required level of technical excellence in different fields of expertise and be able to gain political and public support. To complete the partnership, it may be necessary to persuade partners by presenting the benefits that the SUMP partnership can bring for individual actors and for the city and region as a whole.

Agree on procedures

It is important to design a clear agenda together with institutional stakeholders so they know what is expected and how much capacity may be required. Furthermore, the SUMP partnership needs to agree on the project scope, governance, outputs, timescale and resources required as well as procedures for decision making. Finally, understanding partners' agendas is crucial for reaching agreement on mobility priorities and measure packages. When the SUMP has taken shape, the project management might use specific tools for detailed planning of, for example, staff resources required for the implementation of each mobility measure and the level of involvement of partners during SUMP delivery.

Top skills of a SUMP project manager

- Understanding of the inner workings of the planning authority and cooperation frameworks with external partners
- Management control skills, organisation and time management skills
- Communication skills, writing and presentation skills
- Facilitation, negotiation and conflict resolution skills
- Analytical skills, synthesising results skills
- Quality management and evaluation skills



Mobilising institutional partners for SUMP

Budapest, Hungary



Image: BKK Centre for Budapest Transport

Institutional cooperation in a functional area

Budapest's planning team selected a mix of engagement methods to collaborate with and gather opinions from institutional partners, stakeholders and the public. This included the organisations of consultation fora and SUMP expert events. Agreement was achieved on 59 SUMP measures with more than 120 local and regional institutions and stakeholders. As Budapest is part of a larger metropolitan area, special emphasis was put on cooperating with actors of the functional area. Neighbouring cities as well as transport actors that are active at the regional and national levels (e.g. railway sector) were considered crucial partners and engaged in dedicated formats.

CHALLENGE DILOIS

In total, circa 1,250 comments on the draft SUMP were received, analysed and integrated. The SUMP was politically adopted in 2015.

Collaborating with institutions and politicians

Krakow, Poland



Image: Łukasz Franek, Politechnika Krakowska

Developing a new transport policy

For developing its new transport policy, the City of Krakow aimed to enhance cooperation and participation processes. The city administration worked closely with major institutional partners such as the public transport and road authority, environmental and spatial planning departments as well as the main public transport operator. In order to gain political support for the new policy, special transport policy meetings were held with City Council Commissions involving about 40 councillors. For public involvement, an online consultation was carried out, an inperson consultation point launched and a Mobility Forum event organised. The transport policy was fully updated based on the feedback received



CHALLENGE DILOIS

Establishing an interdisciplinary planning team

Timisoara, Romania



Image: Ordinul Arhitectilor din Romania, Filiala Timis

Enlarging skills and fields of expertise within the team

Redesigning city centre traffic is one of Timisoara's key SUMP measures. At first, the planning team consisted of staff members of very few departments only. During the course of the project, the lack of diversity was recognised and it was decided to widen the range of skills and fields of expertise within the partnership. Therefore, a new planning team was arranged, consisting of experts from various backgrounds (e.g. several departments of the city administration, public transport operator, traffic police, traffic engineers). Round table meetings and expert seminars were held, involving more than 100 local and regional transport professionals. Meaningful cooperation was established with several internal and external institutional partners, which will continue for future SUMP projects.

Workshop series with mobility stakeholders

Zagreb, Croatia



Image: City Office for Strategic Planning and Development

Thinking ahead for mobility

Zagreb aimed to strengthen integrated and participatory planning practices at the

local level and to pave the way for eventually developing a SUMP. Therefore, institutional partners and stakeholders were invited to workshops to discuss how mobility-related goals, priorities and measures set out in the Zagreb Development Strategy could be taken up and further developed as part of a wider SUMP development process. The workshops aimed to determine joint interests in mobility and sensitise participants for a culture of planning that is based on regular communication, mutual consultation and joint decision-making.



Selecting the most effective packages of measures

Rational measure selection can improve the SUMP process by making the process of shortlisting options more efficient, making the policy content more acceptable and affordable, and, above all, making the resulting strategy more cost effective.

Select the most effective policy for your city

Measure selection is the process of identifying the most suitable and cost effective policy measures to achieve the SUMP's vision and objectives and overcome the identified problems. Examples range from building new transport infrastructure to managing the way in which that infrastructure is used, and from service provision to regulation and pricing. Even where the vision, objectives, and problems are defined, it may not be obvious what measures are most appropriate. The process of measure selection should start once a city has specified its vision and objectives and identified the problems to be overcome. The task involves identifying those measures which might best help solve the identified problems ranging from infrastructure to soft measures. One of the challenges in this process is that there is a very long list of possible measures which could be implemented, each of which could be applied in many different ways and packaged with many other measures. The task of identifying possible policy measures is thus not a trivial one.

From long to short lists of measures...

Ideally a city will start with a long list of possible measures which then need to be assessed for appropriateness, resulting in a shortlist of more promising measures. These then need to be specified in more detail as projects to be applied in the city in question and then assessed in more detail. These two stages involve a process of "option appraisal", which should consider effectiveness, acceptability and value for money. The most promising measures and projects will then be considered for implementation at a later stage in the SUMP process. While individual measures may be implemented on their own, it is more common for a SUMP to result in a package of measures, in which individual measures reinforce the effectiveness, acceptability or value for money of one another. The development of packages can start in the option generation step, but is more commonly addressed once a shortlist of measures and projects has been developed. Potential packages can then be appraised using the same option appraisal procedures as for individual measures.





Image: BKK Centre for Budapest Transport

...to measure packages

No one measure on its own will be sufficient to achieve a city's objectives or overcome its problems. Most cities will include several policy measures in their SUMPs and need to think about how these different measures might interact. This is the concept behind creating a policy package. The key to developing a package is to identify which policy measures will work well together, or may be needed to make other measures viable. Barriers for measure packages can include lack of funding, lack of political support and lack of acceptability among the public.

Follow a rational process

In many cities, measure selection is not a rational process, but is often politically driven and led by sectional interests. Local authorities tend not to innovate, but rather to pursue schemes which have been under consideration for a long period and to focus on infrastructure projects and managementbased improvements to the infrastructure, rather than considering enhancements to public transport or ways of managing demand. Guidance developed like KonSULT, an online option generator, seeks to encourage a rational approach based on evidence of best practice based on 64 measures and over 200 case studies.

Key barriers in measure selection in CH4LLENGE cities:

- Governance issues, e.g.
 - -inconsistent policies across government boundaries
 - -mismatch of public and private sector objectives
- Acceptability issues, e.g. with –demand management measures –pricing measures
- Finance issues, e.g.
 –for public transport



KonSULT, the Knowledgebase on Sustainable Urban Land Use and Transport



Images: KonSULT/ University of Leeds

Identifying policy measures

Identifying suitable types of policy measures is the first stage in plan preparation for a SUMP. To this end, CH4LLENGE has developed a Measure Option Generator (May, Khreis and Mullen), which has been incorporated into the Knowledgebase on Sustainable Urban Land use and Transport (KonSULT). KonSULT was developed with the aim of assisting policy makers, professionals and interest groups to understand the challenges of achieving sustainability in urban transport and to identify appropriate policy measures and packages for their specific contexts. The Measure Option Generator is designed to help cities to quickly identify those policy measures and packages of measures which may be particularly relevant for meeting their policy objectives and overcoming their transport problems. It operates within a matter of seconds, and is useful for professionals, politicians, stakeholders and members of the public with an interest in urban transport policy.

POOL TID

The Policy Guidebook

The Measure Option Generator is linked to a Policy Guidebook that provides more detailed information on over 60 policy measures and includes over 200 case studies. Each measure in the Policy Guidebook is assessed in a consistent way from first principles, by considering its impact on demand and supply, and hence on each possible policy objective. This assessment is checked against empirical results from the case studies to provide consistent performance scores which underpin the Measure Option Generator.

To access the database, visit **www.konsult.leeds.ac.uk**



Specifying the detailed design of measures



Ghent, Belgium



Image: Emilio De Baudringhien

As part of its SUMP, the City of Ghent is developing a project to transform the B401viaduct leading to the city centre into a more sustainable transport corridor by replacing it with park and ride infrastructure as well as bike and public transport connections to the city centre. Project start-up commenced by engaging with stakeholders, which enabled cooperation and exposed them to the realities, constraints and compromises potential options. Agreement was of reached on the project definition, scope and mandates between institutional partners. Data collection was enhanced through cooperation with internal and external institutions as well as private industry actors. A traffic model was developed to explore three different scenarios. Design appraisal will continue, for example by means of a spatial exploratory study.

Applying appraisal methods for measures

Dresden, Germany

Appraising types of measures

For its SUMP, Dresden used a detailed appraisal method to categorise its long list of measures:

- experts used the Delphi method to assess each measure against 12 criteria; the resulting sum of these scores was then weighted by a factor to reflect the extent of its potential application;
- the resulting impacts were assigned to five categories of effectiveness;



- the cost of implementing the measure was then assigned to five categories, and
- finally, each measure was assigned to one of eight implementation categories.

CH4LLENGE

Assessing the impact of measures and evaluating mobility planning processes

Monitoring of SUMP measures should be conducted on a regular cycle, while evaluation of SUMP measures should be conducted when major schemes are implemented and repeated over longer time intervals.

Monitoring & evaluation for sustainable urban mobility in Europe

Monitoring and evaluation (M&E) activities deliver data about the progress of the planning process and the impact of policy measures and thus are carried out before, during and after implementation of intervention measures. They provide information to planners and decision makers that allow a timely identification of problems, potential successes or need for readjustment of a SUMP and its measures. However, current monitoring and evaluation practice differs widely across cities and countries in Europe, and many cities report a lack of experience, funding and institutional cooperation that are necessary to successfully carry out M&E activities.



An important step is the development of a M&E plan that describes the current and baseline situation, planning objectives, intended activities, responsibilities and processes. It can be part of the SUMP itself or a free-standing document. A key part of the M&E plan for a SUMP is the definition of indicators for which data needs to be collected during and after implementation. These need to be clearly linked to the SUMP's objectives. CH4LLENGE has developed a M&E plan template for use by urban transport planners. The M&E plan should be considered a living document that needs to be adapted to new developments and knowledge gained during the SUMP process.

Proceed a constant activity

M&E activities should be conducted on a regular cycle, although their frequency might vary, with evaluation taking place at longer time intervals. At the start of the planning process data needs to be collected to identify problems and establish a baseline against which impacts will be compared. Monitoring should at minimum be undertaken at key moments during the SUMP process. Continuous monitoring with routine collection of core data and information should be carried out for the whole SUMP. Evaluation generally happens at the end of planning cycles, but in practice monitoring and evaluation activities will often be carried out in parallel with implementation, e.g. to review intermediate outcomes.





Image: Harry Schiffer/Eltis

Evaluate the planning process and the quality of the SUMP

Stakeholders and the public should have the opportunity to provide their feedback about the planning process and their involvement in a systematic manner and should be entitled to receive information about the quality of the process they have participated in. Process evaluation should be understood as an opportunity to reflect upon the planning process self-critically during and after the SUMP development phase. A systematic reflection is important as the quality, political relevance and stability of a SUMP partly depends on the details of the process. A SUMP Self-Assessment Tool has been designed in CH4LLENGE to enable planning authorities to check and demonstrate the compliance of their planning authority's mobility plan with the European Commission's SUMP concept. The tool focuses on validating the planning process followed by the local planning authority, together with certain aspects of the content of the plan. The feedback from the Self-Assessment helps to understand where the mobility planning authority has strong practices in relation to the SUMP characteristics and where the planning process could be improved.

The primary use of the Self-Assessment Tool is when the planning authority's local SUMP process has been finalised and the plan is freshly approved. It can also be used to evaluate an earlier mobility plan to find out whether the principles of sustainable urban mobility planning were taken into account at that time.

Outcome indicators
Transport activity indicators
Contextual indicators
Output indicators
Input indicators



Developing a M&E framework

Dresden, Germany



Image: City of Dresden

Selecting indicators for M&E

The City of Dresden elaborated a comprehensive list of indicators for monitoring and evaluating its SUMP. In a multi-step process, transport planners of the city administration developed a first set of indicators, which were then discussed with institutional partners. Subsequently, stakeholders, politicians and external cooperation partners were invited to deliberate about the M&E framework. In the end, 45 indicators were chosen for monitoring and evaluation, of which 11 were considered core indicators. In addition, the city administration chose a set of measures for the monitoring and evaluation of selected SUMP measures.

Monitoring and evaluation has been fully integrated into the mobility plan, which contains a dedicated chapter on M&E as well as the indicator list. All indicators were matched with the SUMP objectives and targets. As a further success, the local council decided to carry out SUMP evaluation at regular intervals, namely every three years.

CHAILENGE DILOIS

SUMP process evaluation

When the SUMP development process was concluded, Dresden carried out a participatory evaluation of the process and related engagement activities. Through a comprehensive questionnaire, stakeholders of the Round Table, Round Table Region, Scientific Advisory Board and internal municipal working group were asked to review the SUMP process. Evaluation results were very positive and confirmed that SUMP is a learning process. The evaluation also identified lessons that need to be taken into account in future public engagement processes.



CHALLENGE DILOAS

Establishing a Data Centre of Excellence

West Yorkshire Combined Authority, UK



Image: WYCA

Enhancing data management

West Yorkshire Combined Authority (WYCA) recognised that good quality data and data management, monitoring and evaluation processes are fundamental to robust SUMP development and implementation. WYCA has been developing its practice across a range of thematic areas to move towards establishing operations as a Data Centre of Excellence. WYCA started with some good processes but limited quality and scope of data. Financial constraints and limited access to third party data has placed an emphasis on developing proportionate and future-proofed processes which are resource-light and consistent. The initial focus was on laying a good foundation through auditing existing data, exploring emerging data sources and introducing greater discipline, consistency and clarity into how data is stored, explained and communicated. The next stage was to

make progress in developing evaluation techniques applying the improved data and embedding the new practice within the SUMP cycle.

Storing & managing SUMP data

WYCA uses specialised Performance Management software as an organisationwide data repository to manage kev performance indicators to focus management attention on key metrics. WYCA reviewed the use of the software and its contents. Weaknesses were identified with respect to decentralisation with many different users and uses resulting in duplication or a lack of consistency in inputting data. Actions have focussed on centralising management of the data, aligning the data to SUMP uses and performance reporting, and cleaning up data to improve application to scheme appraisal processes.



Training, learning and experience exchange

A total of 26 Follower Cities committed to improving sustainable urban mobility planning took part in CH4LLENGE's learning and experience exchange activities. For each city, a SUMP roadmap was developed outlining paths for the four challenges to kick-off or enhance SUMP development in their cities.



Taking a detailed look at the four challenges



Four in-depth training workshops were held for more than 170 transport planners from CH4LLENGE's Partner and Follower Cities on participation, cooperation, measure selection and monitoring & evaluation. Through a mix of expert presentations, best practice examples, site visits and group discussions, representatives from more than 30 cities exchanged on the challenges they face in SUMP preparation and solutions for overcoming these challenges.

Developing SUMP roadmaps for the future



CH4LLENGE'S SUMP experts provided support to the project's 26 Follower Cities to enable them to work towards their own SUMPs. Roadmaps were developed in order to kick off SUMP development or progress in existing SUMP activities. Training activities brought together cities with no or only little SUMP experience and cities with more mature SUMP processes and enabled focussed exchange about how to achieve quality SUMP development.



SUMP capacity building for planning authorities



More than 240 transport planners, decisionmakers and stakeholders from local, regional and national levels participated in CH4LLENGE's National Seminars. They were held for the countries of Czech Republic, Hungary, Poland, Croatia and Romania. Each seminar was linked to the national SUMP policy framework and provoked active discussion on how to further establish the SUMP concept in the country at hand. Best practices from CH4LLENGE partner cities aimed to encourage other cities in the country to follow in their footsteps.

Reaching out to the next generation of mobility planners



As part of its training programme, five CH4LLENGE Universities were organised that attracted more than 200 students and young transport professionals from various study programmes. The CH4LLENGE Universities were held in Brno, Budapest, Krakow, Timisoara and Zagreb. Local mobility practitioners as well as experts from CH4LLENGE lectured during the events, followed by interactive group exercises related to local SUMP examples.

SUMP learning around the world



In CH4LLENGE, an integrated online learning environment was created that allows mobility practitioners to take five interactive SUMP courses – a "SUMP Basics" course and four courses each covering one challenge. The courses are self-paced, open to participants from cities and regions across Europe and beyond, and are free of charge. They are intended for those working in the field of urban mobility, although detailed pre-knowledge of the topic is not required. Visit the Mobility Academy at **www.mobility-academy.eu** to find out more!

Expand your horizon

A great number of SUMP knowledge resources were created in CH4LLENGE ranging from handbooks to brand new tools assisting transport planners in SUMP development. These can be accessed at www.sump-challenges.eu and www.eltis.org

SUMP Manuals and quick-facts brochures

Four SUMP manuals and four quick-facts brochures have been designed in CH4LLENGE to support mobility practitioners in improving local transport planning processes and conducting quality SUMP preparation. The brochures provide concise summaries of the challenges while the manuals are dedicated to providing detailed advice underpinned by city examples. Brochures and manuals are available in nine languages: Croatian, Czech, Dutch, English, French, German, Hungarian, Polish and Romanian.





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SUMP Glossary

A SUMP Glossary was produced in CH4LLENGE presenting more than 120 specialist terms relating to sustainable urban mobility planning and the four challenges. The glossary is available on the Eltis portal and integrated into the newly published online version of the SUMP Guidelines and SUMP Self-Assessment Scheme.

SUMP online learning

A comprehensive "SUMP Basics" course as well as four courses on participation, cooperation, measure selection and monitoring & evaluation invite interested mobility practitioners to learn more about sustainable urban mobility planning at their own pace and from anywhere in the world!





SUMP Self-Assessment Tool

Is your mobility plan a genuine Sustainable Urban Mobility Plan? You can now find out using the free online SUMP Self-Assessment Tool!

The SUMP Self-Assessment Tool has been designed to enable ambitious and forward-thinking planning authorities to quickly assess the compliance of their plan with the European Commission's SUMP Guidelines.

The SUMP Self-Assessment is based on a set of 100 clear and transparent yes-no questions that follow the steps in the well-known SUMP preparation cycle. By working through the questionnaire during plan preparation, or once a plan has been finalised, planning authorities can gain feedback on the strengths and weaknesses of their approach.

	European Platform on Sustainable Urban Mobility Plans				
MP If Assessment rerview	Step 1 - Determine your potential for a suc	censhul SUMP			
Day 1 - Deserves plan poleritat for a monadal COMP	At the beginning of the sustainable urban mobility planning process, it is necessary to determine the potential to elaborate a successful Sustainable Urban Mobility Plan. Pranework conditions should be				
Step 2 - Define the development process and scope of plan	analysed including internal and external factors that have an impact on the planning process and plan implementation. For more information please read the section on <u>Step 1</u> in the SUMP Guidelines				
Step 3 – Analyse the mobility situation and develop scenarios	there yee, the responsible glassing <u>subscript</u> made a formal commitment to make <u>subscratter modify</u> proceeds the underlying basis for the <u>subscript</u> .				
Step 4 – Develop a common vision and engage clibers					
Step 5 – Set priprities and measurable targets	Ves	No			
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Step 6 – Develop effective packages of measures 10	2. Has the city council reinforced to commitment to <u>surface the number</u> by signing a covenant (e.g. the Covenant of Mayon) or grieng a network (e.g. the CNITAS Forum)? Development of Mayon) or grieng a network (e.g. the CNITAS Forum)?				
Step 7 – Agree on clear responsibilities and allocate function					
Step 8 – Build monitoring and assessment into the plan	Ves	No			
Step 9 – Adopt Sustainable Urban Mobility Ptan	3. Here you reviewed relevant regulations and plans from the European, national and regional level that have implications for the SULLY.				
Feedback on the tool					
	Yes	No			
	4. Have you retected on the strengths and weaknesses repard to developing the SUMP?	or your existing local planning practices with			

National profiles



WIKIPEDIA The Free Encyclopedia

Wikipedia article

Join the Wikipedia community and contribute to the SUMP article CH4LLENGE that has been published!

An analysis of political, legal, social and technological differences in participation, cooperation, measure selection and monitoring and evaluation has been produced for Belgium, Croatia, Czech Republic, France, Germany, Hungary, Poland, Romania, and the UK.

Pilot documentation

Discover CH4LLENGE's twelve pilot projects in Dresden, Ghent, West Yorkshire, Brno, Budapest, Krakow, Timisoara and Zagreb in the full pilot documentation report!

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Table 3. List of Indicatory	Two for MEE songlers	Reporter Labor		
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Monitoring & Evaluation Plan

A template with concrete guidance to assist in writing local SUMP Monitoring and Evaluation Plans has been developed in CH4LLENGE. It includes advice on establishing a general organisational and procedural framework for monitoring and evaluation activities, presents a large number of indicators and suitable targets, explains methods for data reporting, analyses and evaluation, and gives information on how to communicate results. Further information is available in CH4LLENGE's Monitoring & Evaluation Manual and the template can be downloaded from the CH4LLENGE website.

Key tasks in SUMP development

Key tasks in SUMP development	Definition of SUMP process	Base conditions and scenarios	Visions, objectives and targets
Institutional cooperation			
Investigating legal cooperation frameworks		•••	
Identifying institutional actors and understanding their agendas		•••	
Assessing institutional skills, knowledge, capacities and resources-	-ÓÓÓ-	•••	
Building cooperation structures and defining responsibilities	ŎŎŎ		
Managing institutional partnerships			-000-
Evaluating institutional partnerships			
Participation			
Identifying local and regional stakeholders and their interests			
Developing a strategy for citizen and stakeholder engagement			
Determining levels and methods of involvement	-000-		-000
Managing participation and resolving conflicts		•••	-000
Evaluating the participation process			
Measure selection			
Analysing existing measures, goals, problems and trends			
Identifying and analysing suitable types of policy measures			
Developing detailed specification of policy measures and packages			
Conducting an appraisal of the proposed measures and packages —		•••	
Agreeing on responsibilities and implementing measure packages —			
Monitoring & evaluation			
Elaborating a monitoring and evaluation plan			
Selecting indicators for monitoring and evaluation			
Collecting data and seeking out new data sources	•••	- ČČČ-	
Analysing data and indicators and presenting results	•••		
Evaluating the SUMP development process			





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From process definition to plan implementation

Developing and implementing a SUMP is a dynamic process. It can be broken down into a sequence of phases from process definition to plan and measure evaluation. Phases and related activities are flexible in timing and may be brought forward, put back, or run in parallel. Developing scenarios, for example, can assist in imagining alternative futures and can therefore be conducted before discussing visions, objectives and targets. However, a planning authority can also establish ambitions first and then develop scenarios to identify the most effective path to reach them.

The four challenges in SUMP development

The graph to the left presents key SUMP process tasks for planning authorities related to the four challenges. Institutional cooperation and participation are continuous, horizontal activities with prime importance in the early SUMP definition phase; measure selection as well as monitoring and evaluation activities are particularly relevant in the subsequent analytical and technical planning phases.

SUMP as an iterative process

The graph reflects first-time SUMP development. Revision and updating of a SUMP should build upon the already established structures; therefore, selected tasks may be conducted earlier than in the first planning cycle (e.g. the development of a Monitoring and Evaluation Plan). This publication has been developed within the European project **CH4LLENGE "Addressing Key Challenges of Sustainable Urban Mobility Planning"**, co-funded by the European Commission and coordinated by Rupprecht Consult.

The CH4LLENGE Consortium consisted of the following partners: Rupprecht Consult (DE), Institute for Transport Studies, University of Leeds (UK), Politehnica University of Timisoara (RO), Urban Planning Institute of the Republic of Slovenia (SI), The Association for Urban Transition (RO), Promotion of Operational Links with Integrated Services, Polis (BE), Union of the Baltic Cities, Sustainable Cities Commission (FI), FGM-AMOR (AT), City of Amiens (FR), City of Dresden (DE), City of Ghent (BE), West Yorkshire Combined Authority (UK), City of Brno (CZ), BKK Centre for Budapest Transport (HU), City of Krakow (PL), City of Timisoara (RO), City of Zagreb (HR).

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Rupprecht Consult (2016) CH4LLENGE Manual on Participation: Actively engaging citizens and stakeholders in the development of Sustainable Urban Mobility Plans.

Promotion of Operational Links with Integrated Services, POLIS & West Yorkshire Combined Authority, WYCA (2016) CH4LLENGE Manual on Institutional Cooperation: Working jointly with institutional partners in the context of Sustainable Urban Mobility Plans.

May, A.D. (2016) CH4LLENGE Manual on Measure Selection: Selecting the most effective packages of measures for Sustainable Urban Mobility Plans.

Gühnemann, A. (2016) CH4LLENGE Manual on Monitoring and Evaluation: Assessing the impact of measures and evaluating mobility planning processes.

All manuals are available at **www.sump-challenges.eu** and **www.eltis.org.**

Layout: Laura Sarlin, Union of the Baltic Cities Sustainable Cities Commission

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