Deliverable WP2
D2.1 - State of the art of SUMPS and audit schemes

ADVANCE - Auditing and certification scheme to increase the quality of sustainable urban mobility plans in cities

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1. Executive summary

This report starts off the ADVANCE project by giving an actual overview of definitions and interpretations of a good Sustainable Urban Mobility Plan (SUMP). At the same time, existing audit schemes are listed and analysed. There are a number of finished and ongoing projects dealing with SUMPs or respective audit schemes. ADVANCE will build on this existing and ongoing projects.

1.1 What is a SUMP?

The definition of a SUMP is defined by ELTISplus: a SUMP is a strategic plan designed to satisfy the needs of people and business in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation and evaluation principles. A SUMP defines a set of interrelated measures and is the result of an integrated approach and addresses all modes and forms of transport: public – private, passenger – freight, motorized – non-motorized and moving – parking. A SUMP is a practical tool that can help to improve sustainable planning.

Sustainable Urban Transport and Mobility Planning is a way of tackling transport-related problems in urban areas more efficiently and effectively. Essential characteristics of a SUMP are:

- a participatory approach: involving citizens and stakeholders from the outset and through the process of decision making, implementation and evaluation;
- a pledge for sustainability: balancing social equity, environmental quality and economic development;
- an integrated approach of practices and policies between transport modes, policy sectors, authority levels, and between neighbouring authorities;
- a focus on the achievement of measurable targets derived from short term objectives aligned with a vision for transport and embedded in an overall sustainable development strategy;
- a move towards cost internalisation: taking into account the wider societal costs and benefits;
- a cycle of policy making and implementation, comprising status analysis, policy, strategy, implementation and monitoring and evaluation

There are a number of benefits associated with a SUMP. These include:

- Better quality of life;
- Environmental and health benefits;
- Improved mobility and accessibility;
- Improved image of a city;
- Potential to reach more people;
- Citizen- and stakeholder-supported decisions;
- New political vision;
- Integration potential;
- Improving a city’s competitiveness and access to funding.

The benefits and adding value of a SUMP need to be communicated to decision-makers, planners,... to encourage their preparation and implementation. It is important to emphasize that a SUMP builds on and expands existing plan documents.
1.2 Quality Management (QM) and audit schemes

QM-schemes can be defined as covering and assessing the quality of processes and outputs and giving guidance on how to improve the quality. The review of the QM-scheme and audit schemes is based on the work done in Isemoa and Ecomobility Shift.

How do QM-schemes function?

There is a great deal of commonality between the reviewed QM-schemes. This is unsurprising since many of them have a common parentage, going back to EQMF. They are all based around a set of criteria that define quality. A small number gather data on outputs and outcomes as well as procedures that the organisation in question follows. Two stand out in particular, which are the Swedish Traffic Safety Audit and the Swiss Energy City Scheme. In terms of how well they are used, it is rather difficult to acquire information regarding this. Of QM-schemes reviewed, BYPAD and Swiss Energy City are used the most (BYPAD > 100 cities, Swiss Energy City > 250 cities).

Are there schemes that do as much as ADVANCE seeks to do?

The ambitions for the ADVANCE scheme are aspiring to:

- Cover procedures, outputs and/or outcomes – but preferably all three;
- Allow comparison/benchmarking between different cities right across a continent;
- Award labels to recognise achievement of a certain level of quality in procedures, outputs and/or outcomes.

The closest is probably the Swiss Energy City Scheme as it covers procedures, outputs and outcomes, allows benchmarking and awards labels on different levels of achievement.

What are or can be the key problems?

A procedure that is too time consuming, complex or expensive has to be avoided. This issue can be addressed in three ways by ADVANCE:

- Through the collaboration of ADVANCED cities who give feedback;
- By making the scheme as relevant and useful to municipalities as possible;
- By including different levels of assessment within the scheme.

The scheme lacks credibility

There are a number of ways of building up and enhancing the scheme’s credibility:

- By linking it to a national or supranational accreditation body (EQMF, EEA);
- By linking accreditation or labelling to another authority or higher level of government.

From the review of schemes it is clear that schemes require an organisation to run them as an ADVANCE-expertise team, whose role would be:

- Role as expertise centre;
- Overall promotion of the QM-scheme annex label scheme;
- Managing the database of ADVANCE-users, registration of new member cities, etc...;
- Monitoring and evaluation of ADVANCE–user internal assessment reports, feedback and review of the QM-scheme;
- Prepare Info and training sessions open for any interested stakeholders (cities and consultants);
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- Hold Auditor training sessions that give access to the certificate as ADVANCE-adviser and auditor;
- Monitor and evaluate work of ADVANCE advisers and auditors;
- Keeping list of certified advisers and auditors and assign auditor teams to cities.

2 About ADVANCE

2.1 The ADVANCE-project in the EU

As urban transport is a major source of energy consumption and greenhouse gas emissions, both the “Action Plan on Urban Mobility” and the “Intelligent Energy/STEER Work Programme 2010” consider high quality SUMPs essential in reaching the key objectives of the EU’s 20-20-20 strategy. As underlined by the EC’s “Action Plan on Urban Mobility”, a more integrated approach to sustainable mobility planning will also positively affect the economic performance of urban areas and the quality of the urban environment in general (in terms of health, social life and accessibility). By requiring signatories’ cities of the Covenant of Mayors to include sustainable transport strategies in their Sustainable Energy Action Plans, the European Commission also promotes an integrated approach to energy and climate change. In order to contribute to these EU policy objectives, ADVANCE aims to develop and promote an auditing and certification scheme for European cities and municipalities to monitor and improve the quality of their integrated urban mobility policies and plans. Also the exchange of know-how and best practices on a European scale will be facilitated.

2.2 Summary of the ADVANCE-project

ADVANCE aims to increase the energy efficiency of urban transport and to reduce the demand for transport in European cities. To reach these goals ADVANCE will develop, test and apply an Audit Scheme for cities (ADVANCE Audit Scheme) that helps to set up and improve the quality of sustainable urban mobility plans (SUMPs) and policies. The application of the ADVANCE Audit Scheme will result in local action plans with concrete measures for the city. The ADVANCE Audit Scheme will be practical and user-friendly and will ensure that cities have sufficient resources after the audit to actually implement the measures. The focus of ADVANCE lies on supporting cities without an integrated SUMP or with a SUMP that has significant scope for improvement. For advanced cities, which already have a SUMP, ADVANCE offers evaluation of these SUMPs and its potential for further improvements. The ADVANCE Audit Scheme will be developed by an interdisciplinary team of mobility experts, stakeholders and city representatives. After a validation and improvement phase eight cities will be guided through the scheme and devise eight local action plans. These plans will raise awareness among local decision-makers regarding the correlation of energy efficiency and transport. Cities, which went through the audit and committed themselves to the action plan, will receive an ADVANCE certificate. The future uptake of the results will be assured by training of at least 50 additional external auditors in ten training seminars in ten European countries, which will be applying the ADVANCE Audit Scheme again in a wider group of European cities. Dedicated actions to disseminate the results and share experiences among city practitioners and auditors will be taken. Awareness raising events will be organized in cooperation with strategic partners from national and European networks (EUROCITIES, EPOMM) and related projects (ELTIS-PLUS, ECO MOBILITY SHIFT, ISEMOA).

The ADVANCE-project runs over a period of 3 years.

1 Action Plan on Urban Mobility: COM(2009)490 final
3 Scope and objectives

Considering the potential impact of sustainable urban mobility policies, the main objective of ADVANCE is: to ensure the quality of SUMPs and to promote a widespread implementation of these high quality and integrated policies for sustainable urban transport.

The strategic importance of SUMPs is also underlined in the EU Action Plan for Urban Mobility, which has as Action 1: “Accelerating the take-up of sustainable urban mobility plans”.

SUMPs are important planning tools for developing urban mobility management strategies. An integrated urban mobility policy is one of the main tools for tackling the growing mobility challenges in European cities. All cities in Europe are confronted with a growing number of mobility problems. Citizens need to move from one place to another for work, education or for leisure. To keep this constant increase of traffic flow under control urban mobility plans and strategies have to be developed. Besides this, the decrease of traffic has a lot of positive effects on the environment in the city in terms of less energy consumption, less pollution etc. In that way the development of urban mobility plans and strategies will also be necessary for achieving the 20-20-20 objective and to combat climate change.

SUMPs are obliged in France, Germany, Hungary, Lithuania, the UK and in Spain. In other countries SUMPs are implemented on a voluntary basis (in Austria, Greece, Italy etc.). In Belgium for instance SUMPs are not compulsory but they are preconditions for getting subsidies from the authority. In some countries SUMPs are not very well known (Romania, Greece, Poland etc.) A few cities in these countries have developed a transport plan that mainly focuses on the street network in order to improve traffic flow for cars. At the moment it can be said that the situation in terms of availability and the quality of SUMPs is rather diverse. Consequently, auditing and certification schemes for SUMPs are not well developed either. The quality or status of a SUMP in a city can be compared with the ladder of development on mobility management, which has been described in the MAX project² (6th Framework Programme, 2006-2009), in Work Package C – Quality Management in Mobility Management. ADVANCE defined three categories for a city to identify the status of a SUMP in this city, namely: starting cities, advancing cities and advanced cities. In reality, there are more than three categories to describe a city’s status in terms of a SUMP. However, to illustrate it better only three categories were chosen.

The aim of WP2 is to develop the ADVANCE Audit Scheme and a certification procedure based on the analysis of existing schemes related to urban mobility policies. Furthermore a first internal testing and improvement phase is intended to take place within this work package involving the consortium partners.

After including suggestions for improvement and updating the ADVANCE Audit Scheme, training for the ADVANCE partners who will apply the ADVANCE Audit Scheme in the cities in WP 3 will take place. WP 2 will remain active also during the process of implementation in WP 3 in order to document results and to further improve the ADVANCE Auditing Scheme after its first application in the cities.

² MAX: Successful Travel Awareness Campaigns and Mobility Management Strategies – www.maxsuccess.eu
4 Methodology

4.1 Desk research

There are a number of finished and ongoing projects dealing with SUMPs or respective audit schemes. ADVANCE will build on these existing and ongoing projects.

Some of the key questions to be answered within WP2 include:

- What are the existing definitions of SUMPs?
- What are the common criteria / corner stones of an integrated SUMP?
- What are the corner stones of an integrated urban mobility strategy?
- Which links with other fields (efficient energy use, urban planning, economy, health) are needed for an integrated mobility policy?
- Are there differences between countries / regions (EU / outside EU)?
- Are there guidelines in some countries for developing SUMPs?
- Which auditing and certification models and schemes in the field of sustainable urban mobility do exist?
- What kinds of methods are used for collecting the necessary data for auditing SUMPs and mobility policies?
- What is the actual state of the labeling scheme, which is under development in ECO MOBILITY SHIFT?
- Which actors are involved in the audit process? Are they internal or external or mixed?
- How can auditors be trained and certified?
- EC criteria & requirements regarding SUMPs.

A first answer on these questions will be found via the workshops at the kick-off meeting (see 4.2 Workshops).

4.2 Workshops

At the kick-off meeting three workshops were organized with experts inside and outside the consortium.

The objective of these workshops is to bring all members of the consortium to the same level of knowledge about SUMPS and audit schemes.

The minutes of workshop 1 and 2 are attached in 10 Appendix B.

4.2.1 Workshop 1: role play about Sustainable Urban Mobility Plans (SUMPs)

- 5 groups of 4 persons (as a politician, a transport planner, a citizen and an observer) had to discuss the pro and contra of a SUMP
- Aim: collect arguments about how to convince decision makers to implement a SUMP

4.2.2 Workshop 2: group work on Audit Schemes for SUMPs

- Discussion on 3 topics in 3 groups:
  - SUMPS
  - Mobility policy - strategy
  - Audit and certification
- Aim: discuss the topics with all partners and exchange the expertise on audit schemes and SUMPS
4.2.3 Workshop 3: workshop with ELTISplus

- ELTISplus has investigated the status of SUMPs in 31 European countries and has developed a definition of a SUMP.
- Aim: knowledge consolidation, awareness raising and training on sustainable urban mobility plans in 31 European countries

4.3 Structure of the report

ADVANCE will not start from scratch. Most important is to start with an understanding of previous studies and projects in the field of SUMPs and auditing schemes. The work was anchored on a review of a sample of some 30 studies and projects undertaken at National, European and International level, with either a clear or a potential focus on SUMPS and sustainable strategies in cities. Such projects were reviewed addressing the approaches used in identifying and describing sustainability in cities (policy, different modes of transport, mobility planning,…). A first insight into the available existing projects was given.

Chapter 4 gives an overview of existing projects on sustainability and SUMPs.

In chapter 5 an overview of the different SUMPs in Europe is provided. This chapter is mainly based on the research done in ELTISplus.

Thereafter, in chapter 6, follows an analysis of Quality Management Schemes (QM-schemes) and audits reviewed in the existing projects ISEMOA and Ecomobility SHIFT. Firstly, general and much-used audits and QM schemes are described. Thereafter, all information particularly relevant to ADVANCE is gathered and analysed.

Chapter 7 pictures the general conclusions for the development of the ADVANCE project. It will set the first step of the decision about how the ADVANCE audit shall look like.
5 Overview of existing projects on sustainability and SUMPS

A summary assessment of the relevance of the contents and contributions to ADVANCE and respective descriptions are presented in this chapter. This selection was made upon the perceived potential relevance in terms of description and assessment of SUMPS and sustainable strategies in cities.

Each such project was subject to a characterisation along the following lines:
- Summary;
- Description of the project;
- Contribution to improve sustainability;
- Relevance for ADVANCE with a range from 1 (√ = low) to 3 (√√√ = high)

5.1 Definitions

**Sustainable Urban Transport Planning (SUTP)**: Urban transport and mobility problems today urgently require a multifaceted policy response, based on a long-term strategy and developed in consultation with all pertinent authorities and civil society. At the same time, concrete and achievable targets need to be set in order to demonstrate real change. SUTP takes up this challenge and offers a structured approach to direct local transport planning practice towards the overall goal of a sustainable urban development.

Sustainable Urban Transport Planning differs from conventional transport planning approaches.

**Sustainable Urban Mobility Plans (SUMPS)** define a set of interrelated measures designed to satisfy the mobility needs of people and businesses today and tomorrow. They are the result of an integrated planning approach and address all modes and forms of transport in cities and their surrounding area.

Transport and mobility are very close with each other.
- Transport: to carry, to move from one place to another - a vehicle used to transport passengers
- Mobility: the movement of people

Both, **SUTP** and **SUMPS**, aim to create a sustainable urban transport system, by addressing at least the following objectives:
- Ensure the accessibility offered by the transport system to all;
- Improve safety and security;
- Reduce air and noise pollution, greenhouse gas emissions and energy consumption;
- Improve the efficiency and cost-effectiveness of the transportation of persons and goods;
- Contribute to the enhancement of the attractiveness and quality of the urban environment and urban design.

The policies and measures defined through SUTP and SUMP should comprehensively address all modes and forms of transport in the entire urban agglomeration: Public and private, passenger and freight, motorized and non-motorized, moving and parking.

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3 SUTP Manual, Pilot project, 2007
4 The State of the Art of Sustainable Urban Mobility Plans in Europe, ELTIplus project, July 2011
Sustainable Urban Transport Planning is a way of tackling transport-related problems in urban areas more efficiently and effectively. It builds on existing practices and regulatory frameworks in the Member States, and is developed through the interaction of local mobility stakeholders. Essential characteristics are:

- A participatory approach - involving citizens and stakeholders from the outset and throughout the process of decision-making, implementation and evaluation, building local capacities for handling complex planning issues, and ensuring gender equity;
- A pledge for sustainability - balancing social equity, environmental quality and economic development;
- An integrated approach – of practices and policies between transport modes, policy sectors (e.g. spatial and urban planning, environment, economic development, social inclusion, health, safety), public and private agencies, authority levels, and between neighboring authorities;
- A focus on the achievement of measurable targets - derived from short term objectives, aligned with a vision for transport and embedded in an overall sustainable development strategy;
- A move towards cost internalisation – also reviewing transport costs and benefits across policy sectors, i.e. taking into account the wider societal costs and benefits;
- A cycle of policy-making and implementation - comprising the following five tasks:
  - Status analysis and scenario development;
  - Definition of a vision, objectives and targets;
  - Selection and design of policies and measures;
  - Assignment of responsibilities and resources;
  - Monitoring and evaluation.

It has to be underlined that Sustainable Urban Transport Planning does not simply mean developing a transport “master plan”, embracing all the plans and programmes that local authorities are formally required to prepare. It is also not finished once a plan containing innovative transport measures has been adopted. Rather, Sustainable Urban Transport Planning represents the direction in which current planning practices should be moving continuously in order to enhance sustainable urban transport development. Sustainable Urban Transport Planning – this is the bottom line – is a new planning approach that needs to grow from and within local authorities and existing practices.

In this report we will focus on SUMPS (except in the Pilot project that developed a SUTP manual).

The following short definition of a Sustainable Urban Mobility Plan (SUMP) is consequently suggested for the European-wide promotion of these plans:

A Sustainable Urban Mobility Plan is a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.

5.2 Pilot

5.2.1 Summary

Transport and mobility are vital for society. Socio-economic interaction requires the physical movement of people and goods, which affects people’s quality of life. Despite its crucial function, transport today has a wide range of negative impacts: air pollution, noise, decreased accessibility, congestion and safety problems. These impacts are particularly acute in urban areas. In addition, motorized urban transport contributes substantially to intensify greenhouse effects. Urban transport policy and mobility planning therefore imply choices that strongly affect society as a whole. They shape the environmental, economic, social and cultural future of your city – not only transport infrastructures and services.

5 Adapted from ELTISplus project
In practice, integrated planning processes are hampered by organizational divisions between transport modes, government agencies and services. Transport planning tends to be regarded as a technical task. Consequently, it often lacks adequate stakeholder participation and only delivers piecemeal measures. This is where Sustainable Urban Transport Planning (SUTP) comes in. Urban mobility problems require a multifaceted policy response, based on a long-term strategy. It should be developed in consultation with other authorities and civil society. Concrete and achievable targets need to be set in order to demonstrate real change. To facilitate this innovative mission, the PILOT project is developing guidance on SUTP for European cities and regions.

www.pilot-transport.org

5.2.2 Description of the project

Planning Integral Local Transport (PILOT) was a European project, which demonstrated the preparation of Sustainable Urban Transport Plans (SUTP) in four European cities: Braila (RO), Evora (PT), Lancaster (UK) and Tallinn (EE). In parallel, building upon the experience of these four cities and relying on experts from leading local authorities and organisations in this field, PILOT proposed tools, guidelines and recommendations for the elaboration of sustainable urban transport plans in other European regions and local authorities.

5.2.3 Contribution to improve sustainability

Pilot developed a manual, including 5 tasks and 10 missions for the elaboration of sustainable urban transport plans in EU regions and local authorities. It described the barriers and drivers for effective SUMPs. Finally, PILOT will contribute to the work leading to the formulation and implementation of the future Thematic Strategy on the Urban Environment.

5.2.4 Relevance for ADVANCE

ADVANCE will transfer some of the 5 tasks and the 10 missions into the ADVANCE Audit Scheme. ADVANCE will go one step further and develop an audit scheme focusing on its main elements and allowing cities to have the ability to also put short-term measures into action.

| Degree of relevance | ✓ ✓ ✓ |

5.3 MaxQ

5.3.1 Summary

Keeping customers and users and providing a high level of services are major goals of any organisation and quality is the driving force towards developing efficient and effective services. The MAX project has developed a quality management approach as a powerful tool to improve Mobility Management in general, but especially for cities. It helps to provide services in an organised and consistent manner and to continuously improve them based on user satisfaction and desires. The Quality Management System for Mobility Management (QMSMM) focuses on developing, monitoring, assessing and improving both the overall Mobility Management policy and separate Mobility Management measures.

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5.3.2 Description of the project

MAX ran from 2006 to 2009 and was the largest research project on Mobility Management within the EU’s sixth framework programme. The MAX consortium, of 28 partners served to extend, standardise and improve mobility management. In MaxQ a quality management scheme for mobility management was developed. The QMSMM scheme is a process, which can be adopted by any organisation for managing their mobility policy and measures. That process focuses on developing, monitoring, assessing and improving both the overall Mobility Management policy and separate Mobility Management measures. It involves four steps (policy, strategy, implementation and monitoring & evaluation) and twelve sub steps, which are structured in a quality circle (Figure 1).

![Quality wheel](Figure 1: Quality wheel which gives the elements of quality in Mobility Management)

In order to adopt the QMSMM, a city administration or department must take an active role. They must be prepared to examine and assess their current practices regarding each criterion and then determine how changes could start or improve their Mobility Management. The analysis is done through a combination of document analysis, personal interviews and collective discussions with the Mobility Management team and with the main stakeholders. The resulting assessment forms the basis for further improvement.

This procedure of assessment can be carried out in five different depths, depending on resources and budget. These are starting from the least ambitious and least effort requiring and ending with the most ambitious:

1. **Self-assessment tool**: a short, structured questionnaire which serves as a first and quick scan of the quality status of MM in the city. Done within the MM-team of the city, without any external involvement;
2. **Small internal audit**: done within the MM-team of the city, without any external involvement;
3. **Internal audit**: persons and institutions beyond the MM-team are involved, at least the political level but if possible also external stakeholders;

4. **External audit**: same as above, but with the involvement of an external auditor, that can also help to benchmark with other cities;

5. **Certification and benchmarking**: this can be done when quality is already well established and the ambition is to progress toward total quality management in MM - meaning certification according to a CEN-Norm and attaining an average level of over 4 on the ladder of development.

The Max project developed an audit procedure to support the implementation of the QMSMM. It places the status-quo of each element of the quality circle on a development ladder and provides guidance to make further improvements.

### 5.3.3 Contribution to improve sustainability

The MAX project has developed a quality management approach as a powerful tool to improve Mobility Management in general, but especially for cities. It helps to provide services in an organised and consistent manner and to continuously improve them based on user satisfaction and desires.

### 5.3.4 Relevance for ADVANCE

ADVANCE will work further on the 12 elements or quality criteria that have been developed within MAX. Also the code of practice for implementing quality in the mobility policy of small and medium-sized cities is a useful document to start from. Knowing that the ADVANCE project has the aim to carry out audits only in cities of more than 80,000 inhabitants, we have to consider if it will be useful for larger cities. ADVANCE will mainly conduct the ADVANCE Audit Scheme with external auditors. This was a lesson learnt from MAX and directly taken on board.

### Degree of relevance

![Checkmark](checkmark.png)

### 5.4 BUSTRIP

#### 5.4.1 Summary

As people travel to buy goods and use services, they generate traffic. It is the ordinary day-to-day activities of urban residents - going to the shops, visiting the dentist or attending school - that generate traffic. Many cities face a multitude of challenges related to these activities, congestion, noise, air quality issues, health, safety, quality of life and the problem with a multitude of diverting policies in the field of urban transport. Urban mobility issues are complex and cannot be successfully solved by simple transport plans. They require radical new policy instruments together with an integrated approach to mobility and the design of the cities. BUSTRIP (Baltic Urban Sustainable Transport and Implementation) provides guidance for city planners, administrators and decision-makers on how to meet these challenges through the process of a sustainable urban transport plan (SUTP).

[www.movingsustainably.net](http://www.movingsustainably.net)

#### 5.4.2 Description of the project

BUSTRIP started in July 2005 and lasted till December 2007 and provides an excellent rationale for and guide to SUMP.

BUSTRIP has supported twelve Northern European cities in their groundbreaking efforts to be the first cities in Europe to prepare and implement SUTPs. The objective of this website is to provide tools and
guidance for transport and urban planners and decision-makers on how to plan and implement sustainable urban transport.

5.4.3 Contribution to improve sustainability

BUSTRIP resulted in 12 SUMP s and in the development of a methodology, based on peer review, which can help cities in progressing towards sustainable urban transport.

5.4.4 Relevance for ADVANCE

Apart from the lessons learned on how to develop SUTPs the evaluation of the peer review-methodology gives interesting input for ADVANCE. Also the key recommendations about how to implement a SUTP will be considered when designing the ADVANCE Audit Scheme.

| Degree of relevance | ✔ ✔ ✔ |

5.5 BYPAD

5.5.1 Summary

BYPAD stands for Bicycle Policy Audit. It is an instrument enabling authorities to evaluate and improve the quality of their cycling policy, based on the methods of total quality management.

www.bypad.org

5.5.2 Description of the project

BYPAD (Bicycle Policy Audit) was funded via the IEE programme and was developed by an international consortium of bicycle experts as part of an EU-funded project (in 3 projects 1999-2008).

BYPAD regards cycling policy as a dynamic process where different components must fit together in order to get a well-balanced sustainable cycling policy. Because each step in this policy process has its own characteristics, BYPAD distinguishes 9 modules for which the quality of the cycling policy is determined. The 9 modules all together ensure a balanced cycling policy. Every module obtains a separate quality score. Together they reflect the quality level of the cycling policy in a town, city or region. The BYPAD audit is a self-assessment tool. Based on this quality score a bicycle action plan is prepared.

BYPAD considers cycling policy as a dynamic process, a whole of 9 fields, in permanent development, influencing each other (Figure 2).
5.5.3 Contribution to improve sustainability

BYPAD developed an audit scheme for bicycles policies and describes a qualitative cycling policy as a dynamic process with planning, actions and monitoring as main parts of the model.

5.5.4 Relevance for ADVANCE

The BYPAD method has proven to be a perfect method to integrate stakeholders into a quality management process and to start a long lasting communication process. ADVANCE will therefore orientate itself by the BYPAD method and will also strongly build on the experiences, which have been made over the last few years within BYPAD. The final output of the ADVANCE Audit Scheme will be an action plan and one of the proposed actions can be BYPAD. Furthermore, as the consortium of ADVANCE also includes partners from BYPAD, synergies will be used in a perfect correlation.

5.6 ECOMOBILITY SHIFT

5.6.1 Summary

The EcoMobility Scheme to Incentivise Energy-Efficient Transport (EcoMobility SHIFT) aims to create a set of criteria to assess and help improve the sustainability of local governments’ transport policies. The scheme is referred to as “EcoMobility Label” because it promotes clean and energy efficient mobility systems by awarding a “quality label” to cities for their transport policies, services and infrastructures. The labelling scheme will set criteria for evaluating the walking, cycling, wheeling and public transport “friendliness” of an urban area and the policies to promote inter-modality. Underlying the labelling scheme will be a Quality Management System to help cities and private investors to analyse, understand and improve their transport and mobility decisions so that they can continually improve their performance against the criteria and work towards the highest standards of EcoMobility.
The EcoMobility SHIFT project is establishing a process which will help cities to put a process in place to make a change, to measure the effectiveness of the change and to compare their achievements with other cities.

5.6.2 Description of the project

EcoMobility SHIFT aims at creating a certification scheme to assess and help improve local governments’ sustainable transport policies. Municipalities will be able to obtain an “EcoMobility Label”. The EcoMobility certification scheme is meant for local governments or groups of municipalities responsible for transport policies in an urban region as a whole. The scheme is viewed to be:

- A static measure if overall achievement in EcoMobility (using output and outcome indicators), as well as
- A dynamic measure of process (using a quality management system)
- A realistic external comparative tool, as well as a practical internal management tool (using benchmarking indicators, QMS and auditing procedures)
- As objective and standardized as possible
- Bringing in the users point of view
- Issuing labels for a limited period of time
- Practical and affordable, be available in many languages

In long-term perspective, the certification system aims to:

- Support and promote EcoMobility behaviour, reducing car use and ownership;
- Stimulate the set-up of EcoMobility related policies, infrastructure and services;
- Lower transportation related greenhouse gas emissions and pollution, and promote energy efficiency;
- Increase traffic safety, particularly for pedestrians, cyclists, and all other non-motorized participants;
- Promote an urban planning supporting EcoMobility;
- Improve citizens’ quality of life and health.

The system will promote these long term goals by creating an incentive for cities to obtain such Labels and a positive competition atmosphere between them.

The process towards labelling may have three steps:

- Initial ‘free’ web means for a city for internally assessing;
- The city can signing-up for an externally assisted/ audited assessment;
- An external assessment of a city’s EcoMobile status relative to other cities and the award of a relevant label.

The EcoMobility team considers three labels, similar to Gold, Silver and Bronze. The label will be valid for a period between two and five years (with shorter periods for cities in a starting phase). Details are being worked out.

5.6.3 Contribution to improve sustainability

The main objective of the project is to give local governments both incentives and management tools to implement policies for more efficient, cleaner and safer urban mobility and encourage a shift towards a more sustainable urban mobility culture.
5.6.4 Relevance for ADVANCE
The review of existing QM and labeling schemes will directly be used to define the structure of the ADVANCE audit scheme.
The ADVANCE consortium will be in constant interaction with this parallel running project. While ECOMOBILITY SHIFT is aiming for a labeling scheme for cities, ADVANCE will go one step further as it aims to produce an audit scheme with concrete action plans at the bottom line.

| Degree of relevance | ✓ ✓ ✓ |

5.7 ISEMOA

5.7.1 Summary
ISEMOA (Improving Seamless energy efficient mobility chains for all) is developing standardised Quality Management schemes to support municipalities, cities and regions in their efforts to improve the accessibility of public spaces and public transport. All travelers, but especially those people with reduced mobility (PRM)*, often depend on a car for all their daily trips, due to the barriers they encounter in public spaces and public transport. By improving the accessibility of the whole mobility-chain, local and regional authorities can enable people with reduced mobility (PRM) to adopt a less car-dependent lifestyle and use sustainable modes (walking, cycling, and public transport) instead. Thus by improving the accessibility of public spaces and public transport, local and regional authorities can also achieve energy savings in transport. Furthermore, improving the accessibility of public spaces and public transport increases the quality of life and the attractiveness of the city or region for inhabitants and visitors.

www.isemoa.eu

5.7.2 Description of the project
ISEMOA developed tailor-made quality-management-schemes for continuous improvement in the accessibility of the whole door-to-door mobility-chain in European towns, cities, and regions. These ISEMOA-schemes are following a standardised quality management process based on the successful BYPAD, MaxQ, and MEDIATE-schemes (see 5.12 MEDIATE). Next to development of the quality management ISEMOA organizes training workshops for external auditors and potential multipliers. These training-workshops will take place in 15 European countries in order to enable consultants, agencies, and city-advisors to use the ISEMOA.

5.7.3 Contribution to improve sustainability
ISEMOA aims to help local and regional authorities in Europe to increase energy-efficiency in transport by improving the accessibility of door-to-door mobility-chains and thus enabling all citizens and visitors (including people with reduced mobility (PRM)) to adopt a less car-dependent life-style. In order to achieve this goal, ISEMOA is developing tailor-made quality-management-schemes for continuous improvement in the accessibility of the whole door-to-door mobility-chain in European towns, cities, and regions.

5.7.4 Relevance for ADVANCE
The compilation of QM-schemes and audits will directly be used to define the structure of the ADVANCE audit scheme. ADVANCE will make use of the already identified multipliers. These
multipliers will be directly contacted and invited to join one of the ADVANCE training sessions. The way of how training workshops are organized can be useful for the ADVANCE project.

Degree of relevance

5.8 ELTIS-PLUS

5.8.1 Summary

ELTISplus has investigated the status of Sustainable Urban Mobility Plans in the 31 European countries which are contributing to the Intelligent Energy - Europe (IEE) Programme, i.e. the 27 EU Member States as well as Croatia, Iceland, Liechtenstein, and Norway. Between these countries, the understanding and the approaches of (sustainable) urban mobility planning as well as the respective legal frameworks vary immensely.

In its first project months, ELTISplus therefore focused strongly on the consolidation of existing knowledge concerning the different approaches in the 31 countries. Another focus was the identification of training and awareness raising needs in these countries. The tools applied during the knowledge consolidation phase where desk research, expert and validation workshops, and a user-needs assessment via stakeholder and expert interviews. In 2011, ELTISplus developed the “State-of-the-Art Report on Sustainable Urban Mobility Plans in Europe”.

www.eltis.org and www.mobilityplans.eu

5.8.2 Description of the project

Yet, a common European understanding of Sustainable Urban Mobility Plans is largely missing. ELTISplus offers a proposal for a common and Europe-wide applicable definition. It highlights the benefits of such plans in comparison to traditional transport plans. Furthermore, it makes an attempt to define the minimum requirements for the preparation of good-quality Sustainable Urban Mobility Plans, the content of the plan documents as well as for their implementation.

Benefits of a SUMP

Different approaches to sustainable urban mobility planning exist throughout Europe. The benefits and added value of Sustainable Urban Mobility Plans need to be communicated to decision-makers, planners and other urban mobility stakeholders to encourage their preparation and implementation. Municipalities may consider these plans as yet another plan on the urban agenda. Therefore, it is important to emphasise that Sustainable Urban Mobility Plans build on and expand existing plan documents.

There are a number of benefits associated with Sustainable Urban Mobility Plans. These include:

- Better quality of life
- Environmental and health benefits
- Improved mobility and accessibility
- Improved image of a city
- Potential to reach more people
- Citizen- and stakeholder-supported decisions
• New political vision
• Integration potential
• Improving a city’s competitiveness and access to funding

Awareness of Sustainable Urban Mobility Plans varies considerably across Europe. The EU can take a supportive role in communicating the benefits of Sustainable Urban Mobility Plans. The EU and national level should play a role in fostering networking and exchange on Sustainable Urban Mobility Plans. The local level should also be made accountable that funding is well spent and within an appropriate framework.

It should also be stressed that a Sustainable Urban Mobility Plan does not necessarily require a completely new process, but builds on existing planning activities.

**Key factors for an integrated SUMP**

An important result is that Sustainable Urban Mobility Plans should not be presented as an abstract concept, but as a practical tool that can help improve planning.

The ELTISplus project defined three dimensions of a Sustainable Urban Mobility Plan:

1. Plan making (process): the core of the methodology
2. Plan (content of the document): beyond providing a plan outline, putting focus on actual examples of effective measures
3. Policy (implementation process of the plan and its final appraisal): a new element to facilitate implementation

Developing and implementing a Sustainable Urban Mobility Plan should be regarded as a process of continuous improvement.
5.8.3 Contribution to improve sustainability

ELTISplus has to support the implementation of the Action Plan on Urban Mobility. ELTISplus aims to accelerate the large scale uptake of Sustainable Urban Mobility Plans (SUMPs) by competent authorities in Europe. ELTISplus will consolidate the knowledge on SUMPs and provide a sound basis for outreach in training and activities.

5.8.4 Relevance for ADVANCE

ADVANCE will take advantage of the ELTIS-PLUS training sessions in all EU member states and will raise awareness of the audit scheme through these training sessions. But ADVANCE will use the SUMP elements and activities (process of a SUMP) defined in ELTISplus as a framework for the audit scheme. While ELTIS-PLUS aims to disseminate the definition of a SUMP, ADVANCE is more practically oriented as it plans to guide cities through the audit scheme and concludes with defining an action plan with concrete measures.

Degree of relevance ✅ ✅ ✅
5.9 Sustainable Mobile Cities

5.9.1 Summary
In addition to the good practices implemented in Flemish cities, an analysis of sustainable urban mobility policies in other European cities was commissioned. The recently published European Green Paper “A new urban mobility culture” constitutes the basis for this analysis. In this Green Paper, five pillars for sustainable urban mobility are highlighted: free-flowing cities (congestion-free), green cities (fine dust, greenhouse gases), accessible transport, intelligent urban transport and road safety. These five pillars immediately provide a coherent framework of analysis for the survey of cities of interest in the field of sustainable mobility. This report provides an overview of the results of this research. More information is available on the next web link: http://www.civitasljubljana.si/uploads/datoteke/eindrapport_duurzame_steden_finaal_2-EN.pdf

5.9.2 Description of the project
Initially, 100 European cities were assessed on their sustainable mobility policies. This long list primarily contained cities mentioned in networks on sustainable mobility, either handpicked by local experts or selected following brainstorming sessions. All these cities were screened using some of the criteria emanating from the 5 aforementioned pillars of the European Green Paper. This was the result of extensive desk research and the expertise of independent local experts selected by either the country or the region. The final result was a list of 34 cities.

In-depth information on these 34 cities was gathered using a wide-ranging set of criteria. This information was structured and presented on so-called “index cards” and later presented to the brainstorming group during a presentation.

The brainstorming group then selected the following cities which showed a high potential for sustainable mobility policies and a good mix of both context and approach: Bologna, Freiburg, Groningen, Nantes, Odense, Stockholm, York and Zurich. These cities were visited and analysed on the basis of an ideal policy cycle. This cycle, set up to this end, contained all the relevant steps needed to define both vision and strategy in policies and finally to implement and assess these.

The visit itself was composed of three parts. Firstly, the city was explored by the project team itself to assess its mobility. During rush hours, the transport infrastructure of the city was tested with close attention paid to the various modes of transport. Subsequently, a meeting was held with the policy makers who formulate and implement the policies. Using an exhaustive questionnaire the approach to mobility in the cities was discussed. Finally, people who expressed or still express criticism were heard. Depending on the city visited, meetings were held with cycling associations, environmental groups, automobile associations, public transport companies etc. Their opinions and remarks were taken into account.

5.9.3 Contribution to improve sustainability
The SAMPLE BOOK gives a summary of the essential aspects of a sustainable approach to mobility, based on recommendations highlighted with the most striking examples in the cities that were assessed. There are also examples mentioned of good practices in the field of sustainability in a city.

The focus points for a sustainable mobility:

1. Pay attention to every step in the decision making process
2. Formulate a usable vision
3. Define verifiable goals
4. Make use of opportunities
5. Gather solid support
6. A tailor-made process of participation
7. Organize yourself in an integrated manner and at the relevant level
8. Town and country planning policies and mobility policies: a win-win process
9. A strong public transport structure will serve as a basis for sustainable solutions
10. Cars and their well-defined roles
11. Bicycles as the means of urban transport
12. An active transport management supports the desired behaviour
13. Monitoring and assessing policies
14. Specific attention to specific problems
And … belief in people

Cities that catch the eye in Europe due to their approach to sustainable mobility and keep doing so year after year usually pay a lot of attention to every step and aspect of the policy cycle. When doing so, this policy cycle becomes a circle of success covering 5 fields: policy, organization, implementation, output/outcome, monitoring and evaluation.

**Figure 4: The policy circle or circle of success**

**5.9.4 Relevance for ADVANCE**

A sustainable mobility policy is focused on finding a balance between economic, ecological and social interests, but also on finding broad social support. A sustainable mobility policy aims to meet our mobility needs in such a way that the activities we wish to undertake remain achievable in terms of the necessary (or even unnecessary) transport to do so on the one hand, and, on the other, that the mobility system does not impair other values in our society, whether in the short term, or the long term.

The ideal policy cycle or circle of success contains all the relevant steps needed to define both sustainable vision and strategy in policies and finally to implement and assess these. The circle of success in combination with the 14 recommendations is an important element in defining what a good SUMP is.
5.10 Measuring sustainability of transport in the city – development of an indicator-set

5.10.1 Summary

The aim was to elaborate a framework of indicators to monitor sustainability of transport in Swedish cities. Indicators, related with sustainable transport were collected through a review of the international literature, municipalities' websites in both Sweden and abroad, and via in-depth interviews with municipality officers in Sweden. The result of this phase was a long list – more than 200 indicators – with a wide range of scales, content and fields of use. Based on a number of criteria and conditions, a short list and a framework of sustainable transport indicators for Swedish municipalities were compiled to build a base for a monitoring tool.

5.10.2 Description of the project

The HASTA (HÅLLBAR ATTRAKTIV STAD) indicator framework covers the three dimensions of sustainability, i.e. Economic, Environmental and Social. Under the three sustainability dimensions, there are 6 sustainability aspects (indicator groups), 2-3 per dimension; these are Efficiency, Accessibility (Economic dimension), Accessibility, Safety, Livability (Social dimension); Emissions, Resource use (Environmental dimension). The accessibility indicator group is related with both economic and social sustainability. The individual indicators are structured in three levels of a hierarchical structure. The highest level is represented by the Outcome indicators which reflect the sustainability target in the subject area of the indicator. These Outcome indicators are of both objectively measurable variables and subjective variables, reflecting how the inhabitants experience sustainability of transport in their city. On the lowest level, the Input indicators provide information on possible measures to make improvements in transport sustainability. On the intermediate level, the Output indicators show the effect of the adopted measures (Input indicators). There are 19 Outcome indicators, 22 Output indicators and 42 Input indicators.

The list of indicators is not to be seen as a final or ultimate list. As new knowledge emerges, the list can be updated and - especially to the input indicator list - new indicators can be added. This kind of work is continuous and the framework and indicators should be updated or altered when new knowledge is available.

The new thing with this framework and indicator list compared to earlier works is that, besides objective, measurable indicators, the HASTA framework puts weight on subjective indicators, i.e. how the population experiences the sustainability of transport in their city, their satisfaction with the transport and its effects on the environment and social issues.

Further, a new group of a different kind of indicator set, i.e. Institutional indicators is proposed to be included in the HASTA framework. The Institutional indicators reflect the capacity and readiness of the
municipality administration to handle sustainability issues and they consist of Strategic, Organisational and Actions indicators.

The elaborated HASTA framework constitutes a base for developing a tool, visualising in a simple way the current situation, to monitor sustainability of transport in Swedish cities. The next step in operationalising the HASTA indicator framework is the weighting of the outcome indicators to aggregate them so that decision makers can get a simple picture of the current sustainability situation of their city.

5.10.3 Contribution to improve sustainability

The framework Program HASTA is carried out by Traffic & Roads, Department of Technology and Society, Lund University. Research within this framework focuses on the city and its qualities. One basic quality is safety, but other important qualities are perceived safety and security, accessibility, efficiency, livability and the environment. HASTA’s vision for the sustainable and attractive city is a city that provides, within the frames of the society, its inhabitants’ different and changing needs, without compromising future residents’ needs. The societal frames are defined by ecological, social, and economic sustainability. The purpose of this segment of the HASTA project is to develop a tool to measure sustainability of the transport system in Swedish municipalities.

5.10.4 Relevance for ADVANCE

The indicator framework to monitor sustainability in cities will be used as a basis to develop an indicator set of the ADVANCE Audit Scheme.

| Degree of relevance | ✔️ ✔️ ✔️ |

5.11 EPOMM PLUS

5.11.1 Summary

EPOMM-PLUS builds on EPOMM (European Platform of Mobility Management) and focuses on the new Member States and the states with little mobility management (MM) experience. EPOMM-PLUS will help that MM will be integrated in national transport policies by transferring good practices and supporting local pioneers by developing national networks. Currently there are EPOMM-PLUS network initiators active in 10 states that are not yet member of EPOMM (BE, BG, CZ, EE, GR, HU, LT, PL, RO, SI).

www.epomm.eu

5.11.2 Description of the project

EPOMM-PLUS is a three year project running from 2009 - 2012, supported by the EU in the frame of the Intelligent Energy for Europe’s (IEE) STEER-Programme - EPOMM-PLUS on IEE.

Through the network of EPOMM, which currently consist of 10 member states (AT, DE, FR, FI, IT, NL, NO, PT, SE, UK), EPOMM-PLUS gets a perfect connection to national, regional and local initiatives.

The overall objective of the EPOMM-PLUS project is to achieve a quantum leap in the implementation of MM in Europe, by establishing EPOMM as the authority and the networking instrument for the promotion of Mobility Management across the EU.
5.11.3 Contribution to improve sustainability

EPOMM-PLUS will help to integrate Mobility Management in national transport policies by transferring good practices and supporting local pioneers by developing national networks of Mobility Management.

5.11.4 Relevance for ADVANCE

EPOMM-PLUS can be important for the dissemination of the ADVANCE Audit scheme.

Degree of relevance ✓ ✓

5.12 MEDIATE

5.12.1 Summary

The Mediate project (Methodology for Describing the Accessibility of Transport in Europe) has developed tools to assist public authorities and transport operators in achieving equality of access to public transport. Successful policy-making on accessibility, moreover, entails good end-user involvement, which Mediate has helped strengthen at European level.

www.mediate-project.eu and www.aptie.eu

5.12.2 Project description

The Mediate project has developed the following tools to help cities and transport operators improve accessibility in public transport:

- A set of common European indicators for measuring accessibility of urban public transport and allowing for a common understanding between different stakeholders, at European and local level;
- The self assessment tool helping stakeholders to assess strengths and weaknesses of the transport system and to define appropriate actions;
- The Good Practice Guide presenting examples of implemented measures throughout Europe on a range of themes;
- The APTIE website, a ‘one-stop shop’ on accessible public transport (www.aptie.eu – Accessible Public Transport In Europe).

Mediate has also set up an End User Platform representing, on European level, people with disabilities, older people and other relevant groups who face barriers when using public transport. It will help end-users monitor and provide advice on the accessibility of public transports within European projects and beyond.

5.12.3 Contribution to improve sustainability

MEDIATE has developed a methodology to measure the accessibility of transport in Europe.

5.12.4 Relevance for ADVANCE

Although focused on public transport, the developed tools might contribute much to the ADVANCE Audit Scheme.

Degree of relevance ✓ ✓
5.13 COMPETENCE

5.13.1 Summary
COMPETENCE - Strengthening the knowledge of local management agencies in the transport field is a 30-months project co-financed by the European Commission within STEER within the framework of the Intelligent Energy - Europe Programme IEE. The main activities in COMPETENCE are the design and implementation of international and national training and know how transfer activities, the design of training materials and the implementation of case studies as part of a training-on-the-job-program. The beneficiaries of the project are mainly local and regional energy agencies but also other organizations like environmental agencies, health bureaus etc. interested in enhancing their knowledge and skill base in the topic of urban transport. The COMPETENCE project consortium involved the active participation of 15 countries in Europe.

www.transportlearning.net/competence

5.13.2 Description of the project
The whole COMPETENCE project is focusing on a well-balanced allocation between theories and practical applications of the training contents. Additionally, each participant of the European Training Sessions will implement a small project as “training on the job”. The trainers who will also coach the participants during these project implementations are well established in their field of activities and have a wide experience on practical achievement of projects.

The COMPETENCE approach guarantees the theoretical basis know how, practice orientation, know how transfer and networking.

COMPETENCE is having a two-level approach. The core of the first level are three European Training Sessions (each one lasts one week) where all partner organisation will participate with 1-2 attendees. This is a “train-the-trainer-program” and these persons will be trainers for their own countries in level 2. Level 2 will focus on know how transfer on national level where all interested third parties could participate. While the three European Training Sessions will be carried out in English, the national know how transfer sessions will be carried out in national languages.

5.13.3 Contribution to improve sustainability
The focus is setting up training and training materials. Of course training external auditors is an important issue to disseminate the ADVANCE Audit Scheme.

5.13.4 Relevance for ADVANCE
The Competence training content can be important defining the training of the external auditors. The next, similar project on capacity building for sustainable transport is TRANSPORT LEARNING. Training courses will be given in TRANSPORT LEARNING and the development of the training concept might be useful. The project started in May 2011. It does not focus on SUMPs and Audits, but training materials on eight topics (walking & cycling, mobility campaigns, communication training, PT, street design, land use & housing, measures for families and children as well as parking space management) will be developed. Maybe it will be important for the design of the Audit.

More information: www.transportlearning.net.

Degree of relevance: ☑️ ☑️
5.14 E-Atomium

5.14.1 Summary
e-ATOMIUM aimed to increase the knowledge and competencies of energy agencies, energy advice centres and local authority energy professionals in the field of sustainable energy use in transport. www.e-atomium.org

5.14.2 Description of the project
In the short term e-Atomium will, therefore, develop and provide tailor made training and educational programmes for the specific target groups in a way to extend their competencies, knowledge and network in the field of transport and mobility.
On the long term the project wishes to address the supporting role and stimulate the active participation at local, regional and European level from the energy agencies and other local actors in the field of sustainable energy use in transport.

5.14.3 Contribution to improve sustainability
Trainings and educational material to four training topics were implemented (awareness raising, transport demand management, mobility management and alternative fuels).

5.14.4 Relevance for ADVANCE
The development of the training material can be interesting for the ADVANCE project.

Degree of relevance ✔

5.15 BENEFIT

5.15.1 Summary
The main objective was to show companies and their employees the attractiveness of public transport systems compared to car use. Especially in the New Member States private car ownership is rising rapidly. BENEFIT addressed this issue and aims to achieve a modal shift from the car back to public transport, and in the process, achieved substantial energy savings, emissions reductions.

www.eu-benefit.eu

5.15.2 Description of the project
BENEFIT made use of existing networks (e.g. ELTIS) as well as establishing new networks (e.g. through the local stakeholder forums) to reach its main target groups. This strategy formed the basis for the success of BENEFIT and prepared the ground for potential followers. In this way, BENEFIT contributed to a substantial modal shift from single car use towards the more energy-efficient public transport mode - thereby reducing energy consumption, reducing pollution, reducing accidents and enhancing the quality of life (especially in cities).

5.15.3 Contribution to improve sustainability
Advanced measures for students, for University campus areas and for companies to increase public transport use of their employees.
5.15.4 Relevance for ADVANCE

The focus is more on measures for companies than for individuals. The project is not very relevant for ADVANCE.

Degree of relevance

5.16 NICHES+

5.16.1 Summary
The continuous increase of traffic constitutes a major challenge to the viability of our cities. New strategies are needed to make urban transport more accessible, more efficient and more sustainable. NICHES+ is an EU funded project which studies and promotes the uptake of the most promising innovative concepts, in order to transfer them from their current “niche” position to a mainstream urban transport application.

www.niches-transport.org

5.16.2 Description of the project
The project looks into the details of 12 innovative measures, structured in 4 thematic areas:

- Innovative concepts to enhance accessibility
  - Travel training for public transport
  - Neighbourhood accessibility planning
  - Tailored traveller information for users with reduced mobility
- Concepts for Efficient Planning and Use of Infrastructure and Interchanges
  - Passenger friendly intermodal interchanges
  - Innovative cycling facilities for intermodal interchanges
  - Infrastructure for innovative bus systems
- Traffic Management Centres
  - Financing and implementing traffic management centres
  - Mobile travel information services for the public
  - Using environmental pollution data in traffic management
- Automated and Space Efficient Transport Systems
  - Group Rapid Transit
  - Personal Rapid Transit
  - Using electric vehicles in city car share schemes

5.16.3 Contribution to improve sustainability
The mission of NICHES+ is to promote innovative measures for making urban transport more efficient and sustainable and to move them from their current “niche” position into a mainstream urban transport application.
5.16.4 Relevance for ADVANCE
The project does not specifically include the development of a scheme, or of indicators to define the sustainability of a city.

| Degree of relevance | ✓ |

5.17 CIVITAS

5.17.1 Summary
The CIVITAS Initiative ("City-Vitality-Sustainability", or "Cleaner and Better Transport in Cities") was launched in 2002. Its fundamental aim is to support cities to introduce ambitious transport measures and policies towards sustainable urban mobility. The goal of CIVITAS is to achieve a significant shift in the modal split towards sustainable transport, an objective reached through encouraging both innovative technology and policy-based strategies.

[www.civitas-initiative.org](http://www.civitas-initiative.org)

5.17.2 Description of the project
Exploring innovative solutions to the challenges posed by creating a more sustainable urban mobility culture is at the heart of the CIVITAS Initiative. There is no one single recipe for success. In some instances the challenges are technical or logistical, in others extensive citizen engagement is required to really achieve change. Each city is different and has to address the particularities of its own situation.

Within CIVITAS, eight thematic categories of measures have been identified as the basic building blocks of an integrated strategy for sustainable mobility. These building blocks put in place a planning framework, guarantee political involvement and establish partnerships. Each city chooses a set of mobility solutions from these building blocks according to their local priorities.

The eight building blocks comprise:
- Clean fuels and vehicles;
- Collective passenger transport;
- Demand management strategies;
- Mobility management;
- Safety and security;
- Car-independent lifestyle;
- Urban freight logistics; and
- Transport telematics.

5.17.3 Contribution to improve sustainability
Each CIVITAS city chooses an appropriate set of measures from these building blocks, and combines them to form integrated solutions for clean urban transport in cities. Forerunners and well-experienced CIVITAS cities in these specific areas of sustainable transport can be seen as a source of inspiration for other cities to capture interest, trigger reflection and to support an interactive process.
5.17.4 Relevance for ADVANCE

The categories of measures can inspire to define actions and measurements for implementation and improvement. ADVANCE city Malmö participates in CIVITAS SMILE.

| Degree of relevance | ✓ |

5.18 QUEST

5.18.1 Summary

The QUEST project will develop an audit tool to evaluate and improve the quality of urban sustainable transport. At the end of a QUEST audit cities receive a QUEST quality label which recognizes the efforts in sustainable urban transport planning. In the future this labelling system can form the basis for investment programs from different policy levels to support local authorities. QUEST is building further on experiences with existing quality management tools for urban transport and environment like BYPAD, MEDIATE, EMAS, … and recognizes the EU-framework for sustainable urban transport plans which was developed in PILOT.

5.18.2 Description of the project

QUEST is however more than giving a quality label to cities. The main aim is to support cities in actually making progress. Depending on the present quality level on sustainable urban transport (= audit) a specific improvement program for urban mobility policy is set up (certifying process). QUEST distinguishes three types of improvement programs: starters, climbers and champions.

- **Track 1** (‘blueprint for a kick start’) = initiating the development of an urban mobility plan in starter cities: these cities have little or no experience in an active mobility policy. The aim for this track is to provide these cities with essential elements of mobility measurements that have proven their effectiveness throughout Europe.

- **Track 2** (‘strengthening urban mobility policy’) = strengthening specific themes of the urban mobility plan/policy in climber cities: these cities already have experience in shifting the modal split but can still make substantial improvements. An audit based on the principles of Total Quality Management will help identify the most effective next improvements towards more sustainable mobility.

- **Track 3** (‘inspiration for excellence’) = dissemination of good practice and knowledge exchange between champion cities: these cities act as inspiration and role model for starter and climber cities. They provide success stories about how they have reached results after sometimes decades of perseverance in urban development and transport planning.

The intensity of the improvement program is directly linked to the quality level of sustainable urban mobility. Effort is being focused primarily on starter cities and secondary on climber cities. Champion cities have sufficient experience in sustainable mobility to come up with adequate improvements themselves. Within QUEST they act as an inspiration and a role model for other cities.

5.18.3 Relevance for ADVANCE

The ADVANCE consortium will be in constant interaction with this parallel running project. The project leaders of both projects (QUEST and ADVANCE) will participate in the project meetings of the other project.
5.19 ASTUTE

5.19.1 Summary
ASTUTE is a three year project, part of the Intelligent Energy for Europe’s (IEE) STEER Programme. Its aim is to increase the number of walking and cycling journeys in Urban Areas. www.astute-eu.org

5.19.2 Description of the project
Increasing the percentage of travel undertaken by walking or cycling is a clear way to reduce CO2 emissions. Working in six urban areas - Budapest, Dublin, Granada, Graz, London and Siracusa - and focusing on behavioural change through the use of ‘soft measures’ (education, training and publicity), ASTUTE overcame the organisational barriers that prevented an increase in the use of walking and cycling in European cities. This was achieved across a variety of policy and decision-making systems, through the provision and use of practical solutions in both the public and private sectors. In addition, measures were piloted in the private sector through the development of Workplace Travel Plans (Mobility Plans).

The ASTUTE project:
• Identified the 10 barriers to walking & cycling
• Developed the ASTUTE Toolkit of best practice to overcome them
• Used the methodology to implement actions in municipalities and workplaces including:
  – Bike training for children
  – Innovative walking maps
  – New awareness-raising techniques
  – Events and competitions
• Trained 5 ASTUTE Agents to disseminate the mobility management best practice in New Member States
• Set up dozens of new Travel Plans (Mobility Plans) for organisations and reduced CO2 emissions accordingly.

5.19.3 Contribution to improve sustainability
The ASTUTE project was made up of partner organisations based in 6 European partner cities. Ultimately, ASTUTE aimed to identify, understand and overcome the barriers that prevent increasing the use of sustainable, environmentally friendly and energy efficient modes transport such as walking or cycling throughout Europe.

The partners have overcome these barriers with the use of the ASTUTE Toolkit which is available on this website. It comprises over 100 Best Practice examples from across Europe of how public and private sector organisations have effectively increased walking and cycling.

5.19.4 Relevance for ADVANCE
The toolkit can give inspiration to overcome the barriers, especially for walking and cycling, by defining the indicators in the ADVANCE audit scheme.

Degree of relevance ✔ ✔
5.20 Other existing projects

There are a lot of international projects reviewed that will have a great contribution for ADVANCE. The following projects are also interesting but did not give new input on the ADVANCE project: LundaMats, AENEAS (reviewed in MEDIATE), C-LIEGE, PROMOTION, SNOWBALL, FLEAT, SPICYCLES, E-STREAM, BALANCE, SUMA, SUTECA, SUMPA, CARPICE and LEPT.
6 SUMPS in Europe

This chapter gives an overview of the current situation regarding Sustainable Urban Mobility Plans in Europe based on the research done in ELTISplus.

6.1 General

The level of understanding of and commitment to Sustainable Urban Mobility Plans varies widely across Europe. This ranges from countries with long-established transport planning credentials which have now moved towards preparing Sustainable Urban Mobility Plans, to countries where this type of plan is little known and whose transport planning approach is entirely based on infrastructure and subsumed within statutory land use plans. Figure 5 gives an overview of the Status of SUMPS in the different countries of Europe.

![SUMP Status in Europe](image)

**Figure 5: SUMP status in Europe (ELTISplusproject - Rupprecht Consulting, July 2011)**

There were some general queries and comments relating to elements within SUMP which included:
- The need to strongly link action plans, achievements and monitoring;
- The need for quality assurance / peer review in the process;
- The need to adequately involve the community throughout (and to ‘educate’ them on the full meaning of ‘sustainable mobility’);
- There was some question as to how cost internalisation might be realistically achieved;
- Plan development should be predicated on proportionality (to size of community) in terms of processes and resources.

The major barriers to the development of Sustainable Urban Mobility Plans across the whole of Europe seems to be lack of political will among politicians, existence of car-orientated communities (and associated lobbies), a lack of knowledge among both officials and communities, and lack of resources (technical knowledge) to both deliver the plans and to implement their contents. This last point is felt most acutely in New Member States.
Institutional barriers related to different levels of governance were also mentioned, as were organizational barriers such as the lack of experience or opportunity for joint working between transport and land-use planners.

In the ELTISplus project, 3 types of countries were defined:
1. Countries which have a well-established transport planning framework (combined with a legal definition and/or national guidance on SUMPs);
2. Countries which are moving towards an approach to sustainable mobility planning;
3. Countries which have yet to adopt sustainable mobility planning.

In the ADVANCE project we define three categories for a city to identify the status of a SUMP in this city, namely:
1. **Starting cities**: these cities do not have a SUMP or a sustainable mobility strategy at all. The city only takes ad hoc measures in case of an urgent mobility problem and will only give short term and purely technical solutions towards mobility problems. For **starting cities** the ADVANCE Audit Scheme will support the identification of actions needed most to form the basis for a SUMP in the long run.
2. **Advancing cities**: the city has a SUMP and there is a common vision on which mobility strategy to follow. There is a systematic approach towards actual or expected mobility problems. The city takes first steps in evaluating the current mobility policy to find out in which fields improvements are possible. **Advancing cities** will be able to detect gaps or weaker parts in their SUMPs, via the ADVANCE Audit Scheme. It will allow assessing, comparing and prioritizing actions and bring them quickly into action.
3. **Advanced cities**: the city has a SUMP and a clear mobility strategy. The mobility policy is constantly evaluated and quality indicators are being used. The city anticipates expected mobility problems via monitoring. The mobility policy is oriented to the future and innovative solutions are implemented. There is a clear link between the mobility policy and other action fields like urban planning, economy, health, etc. For **advanced cities** the ADVANCE Audit Scheme will focus more on the mobility strategy and on the processes behind a SUMP.

In fact, the categories used in both projects do have the same content. So, here we will use our categories for the analysis undertaken in the ELTISplus project in relation to the three ‘types’ of countries:
1. **Advanced**: countries which have a well-established transport planning framework (combined with a legal definition and/or national guidance on SUMPs);
2. **Advancing**: countries which are moving towards an approach to sustainable mobility planning;
3. **Starting**: countries which have yet to adopt sustainable mobility planning.

### 6.2 Advanced

There were six countries identified in this category: France, Germany, Italy, Netherlands, Norway and the UK; in addition, the region of Flanders in Belgium fits into this category and Sweden.

Good examples of Sustainable Urban Mobility Plans have been identified in this group of countries: Gent in Belgium, Lille in France, Freiburg in Germany, Bologna and Reggio Emilia in Italy, Groningen in the Netherlands, Trondheim in Norway as well as Nottingham and York in the UK and Ljubljana in Slovenia.

Significant **challenges** in moving from a transport plan to a Sustainable Urban Mobility Plan are:
- The need to strongly link action plans, achievements and monitoring;
- The need to adequately involve the community throughout (and to ‘educate’ them on the full meaning of ‘sustainable mobility’);
A query on where to bring in cost-benefit to the process (during the plan preparation or in relation to the delivery of individual elements).

A number of substantial barriers were identified when developing SUMP in many of these countries, mainly related to changing from the existing regime of movement-related transport plans. The barriers identified included:

- Existing car-infrastructure orientation within the community (particularly, strong lobbies);
- Resistance from established planning and engineering officials, and a lack of joint working between sectors, particularly transport and land use;
- Lack of relevant knowledge among officials;
- Lack of funds for the preparation of Sustainable Urban Mobility Plans and increasingly for infrastructure itself;
- Lack of coordination between different levels of government;
- The greater requirements for public participation compared to conventional transport plans;
- Adverse responses to EC-led initiatives;
- Political conservatism.

### 6.3 Advancing

Nine countries were identified that fit into this block: Austria, Denmark, Estonia, Finland, Hungary, Poland, Portugal, Spain, Slovenia and Sweden, and the Belgian region of Wallonia. It should be noted that the degree to which the plans conform to the definition of a Sustainable Urban Mobility Plan varies considerably.

There are number of points on the content of Sustainable Urban Mobility Plans, which included:

- The need for quality assurance / peer review in the process;
- The ambition to achieve a realistic plan implementation with measurable targets;
- The importance of placing a greater emphasis on safety than in traditional plans;
- An emphasis on raising awareness about ‘sustainability’ in the community and ensuring full participation;
- Uncertainty as to how cost internalisation might be realistically achieved;
- The problem of how to include ongoing infrastructure renewal/upgrading;
- The need to integrate with regional plans;
- Whether the process should be undertaken in two-stages (the first using traditional transport planning methodology and a second related more to ‘social and other parts’).

The main barriers to the development of Sustainable Urban Mobility Plans in these countries were:

- Car orientation in terms of the community, lobbies and existing transport funding;
- Lack of relevant knowledge;
- The potential time required to prepare a plan;
- The expense of preparing a plan;
- The lack of resources to actually implement any measures from a plan;
- Political will or, indeed, lack of political interest – the idea of a SUMP is often quite abstractly-communicated and to interest politicians it has to be linked to the measures that would be implemented as a result, and to a clear demonstration of its advantages compared to a more traditional infrastructure-based approach to planning.

The specialists in these countries have mainly used the PILOT and BUSTRIPT guidance from EU projects to provide relevant information, but mentioned also DG ENV SUTP Guidance, SUTP Efficiency Study, GUIDEMAPS handbook and the CIVITAS / Eltis websites.
This type of countries is climbing the knowledge curve but has some way to go. There seems to be limited national support and guidance although there is local interest and momentum in some places. Local political support is somewhat limited and dependent on voter response, and on presenting the case to politicians that SUMPs will confer advantages in comparison with a more traditional approach.

6.4 Starting

The countries which have been identified as only at the start of sustainable mobility planning are: Bulgaria, Croatia, Czech Republic, Greece, Ireland, Latvia, Lithuania, Malta, Romania and Slovakia. In common with countries in other categories, some of these countries (e.g. Greece, Lithuania) have a statutory planning framework within which transport planning sits, but transport planning is defined very much as planning of new infrastructure.

Some queries were raised in relation to the contents of SUMPs, which included:
- The task, in terms of resources, of preparing the plan should be proportional to size of community;
- Public participation was somewhat problematic in areas where there was little experience of the process;
- There should definitely be measurable targets for the plan;
- There was some question as to how cost internalisation might be realistically achieved.

Somewhat similar barriers apply to SUMPs in these countries as to the other country types above, the main ones being:
- Car orientation and strength of lobbies;
- No perceived added-value over conventional transport plans;
- Lack of knowledge and resources;
- Lack of defined responsibilities and priorities in the area;
- No public pressure and therefore no political commitment.

In addition, for this and the previous type of countries, but most especially for those that are former communist countries of Eastern Europe or from ex-Yugoslavia, the term “planning” often has negative connotations which any new planning system has to overcome before it can gain any credibility. In these countries also, transport planning tends to be very infrastructure led and there are few statutory transport plans; instead, the statutory planning system is embodied in land-use plans that identify corridors and areas for new transport infrastructure.

These countries are at the start of both understanding and taking forward the SUMP concept.

6.5 Guidelines

It should be clear from the outset that urban transport and mobility is not an end in itself but should contribute to higher goals, such as quality of life and well-being of the citizens. This should be the starting point for developing a Sustainable Urban Mobility Plan. Depending on the national context a legal obligation can also be the driving force for developing a SUMP. Nevertheless real commitment is needed to make it a truly sustainable and effective plan.

Regarding guideline, some countries are lacking guidance. Some countries have a variety of guidance material where knowing which one to follow may be difficult. Even if there are guidelines, there is also a need for “good practice”.

6.5.1 France

Since 1996, urban areas with more than 100000 residents have been obliged to draw up a PDU. At the moment 72 cities have a SUMP. ‘A PDU defines the principles of the organization of the people and freight traffic, the traffic circulation and the parking policy within the city limits’ (Act of 1982). The local authorities responsible for PDU preparation and financing are the urban transport authorities,
voluntary co-operations between adjacent municipalities. To develop a PDU there is a manual “Plan de déplacements – Guide” (only available in French). This document proposes a methodology to define the elements and objectives of a PDU. Every 5 years a revision of the PDU has to be done. The aim of the revision is to evaluate the progress and implementations to improve the PDU and the sustainability in the city. The revision is obliged by law, but it is often not easy to do it practically. Therefore a manual with guidelines is developed by CERTU. The manual suggests a methodology in terms of some general recommendations (data access, diffusion, partnership, control elements,...) and in terms of indicators for the different fields covered by the PDU.

6.5.2 Flanders (BE)
In Flanders (Belgium) there is a handbook to develop mobility plans published by the Flemish government. The handbook describes the framework of the SUMP (only available in Dutch). There is a regulation that a city receives funding for developing and implementing the mobility plan if the city is engaged in making a mobility plan. The funding is phased.


6.5.3 Sweden
“Accessible City” (Tillgänglig stad) is a Swedish handbook providing advice on goals, strategies and procedures for municipalities developing an accessibility plan for the transport network. The handbook aims to establish a systematic approach in planning for accessible cities, to gain the necessary support among actors involved, and to maximize the benefits of resources invested. In addition to the handbook, standards for accessibility are provided in a database application and in a manual covering all aspects of accessibility (public spaces, public transport, maintenance, municipal policy and planning documents, etc.). The procedure comprises six phases:
- Phase 1: Organization (vision and goals)
- Phase 2: Travel demand and primary routes including both public spaces and public transport.
- Phase 3: Inventory of the accessibility/usability of the routes
- Phase 4: Analysis of measures and establishment of an action programme
- Phase 5: Control of fulfillment of objectives and estimation of their consequences on accessibility
- Phase 6: Compilation of the accessibility plan

http://www.biblioteket.stockholm.se/default.asp?id=8227&extras=926096%2FID
(Only available in Swedish)

6.5.4 Other countries
Poland, Slovakia, Austria and Slovenia do not have a national framework to put in SUMPs. In Catalonia (ES) there is a legal framework for municipalities over 20,000 inhabitants to develop a SUMP.

http://www.eu-advance.eu
7 Quality management and audit schemes

7.1 Review of previous initiatives

The review of the QM-schemes and audit schemes is based on the work done in Isemoa and Ecomobility Shift. In Isemoa more than 50 different schemes and audits were identified and analysed. 25 schemes were reviewed in EcoMobility Shift. The list of the reviewed schemes is available in Appendix A.

The key deliverables that were analysed for this chapter are:

− Review of Existing Quality Management and Labeling Schemes, April 2011, EcoMobility Shift project
− Compilation of QM-schemes and audits, March 2011, ISEMOA project
− QM-schemes and audits – Fact sheets, March 2011, ISEMOA project

7.2 Definitions

Below are some definitions of terms used in this chapter.

**Quality Management schemes (QM-schemes)** cover and assess the quality of processes and outputs and give guidance on how to improve the quality.

An **audit** assesses the current situation (process and/or output). For example the guidelines for auditing in ISO19011 (2002) define an audit as “a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled”.

Many QM-schemes include some kind of audit, but most audits are not themselves QM-schemes.

An **indicator** is a variable selected and defined to measure progress toward an objective. Indicators are used in complex situations to provide a practical and economical way to track, for example, the state of the environment for example. An indicator is never assumed to provide a complete description of something. Gudmundsson’ reviewed several definitions of an indicator in his work and uses the following definitions:

- “An indicator is a variable, based on measurements, representing as accurately as possible and necessary a phenomenon of interest.”
- “An indicator of environmental sustainability in transport is a variable, based on measurements, which represents potential or actual impacts on the environment - or factors that may cause such impacts - due to transport, as accurately as possible and necessary.”

There are different types of indicators: qualitative and quantitative, absolute and relative. Another typology used is the “production system” or the input-output-outcome approach:

- Input indicator: resources required to provide a service or product (e.g. manpower, planning costs)
- Process indicator: the way the service is produced (e.g. public or private)
- Output indicator: the services, products or results (e.g. number of cycle lane km built)
- Outcome indicator: the impact or final results (e.g. clean air)
- Efficiency indicator: ratio input / output

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7 Gudmundsson, Henrik et al, (2010), Indicators of environmental sustainability in transport, An interdisciplinary approach to methods. Institut national de recherche sur les transports et leur sécurité – INRETS
8 From Gudmundsson, Henrik et al, (2010), Indicators of environmental sustainability in transport, An interdisciplinary approach to methods. Institut national de recherche sur les transports et leur sécurité – INRETS.
• Effectiveness indicator: ratio input / goals

**Benchmarking** is the process of comparing one’s business processes and performance metrics to industry bests and/or best practices from other industries. Dimensions typically measured are quality, time and cost. Improvements from learning mean doing things better, faster, and cheaper.

An **internal audit** is conducted on behalf of the organisation itself for management review and other internal purposes and may form the basis for an organisation’s self-declaration of conformity. So the audit client is the same one as the auditor. In many cases, particularly in smaller organisations, independence can be demonstrated by the freedom from responsibility for the activity being audited or freedom from bias and conflict of interest.

**External audits** are conducted by parties having an interest in the organisation – such as customers or by other persons on their behalf.

**Third party audits** are conducted by independent auditing organisations, such as regulators or those providing registration or certification. Here the client is not the same one as the auditor.

### 7.3 Structure of the schemes

#### 7.3.1 Process covered in the QM schemes

A QM-scheme can cover one or more of the following areas:

- The working process/QM-approach (which is described by process-related indicators).
- The actual situation (which is described by “status”-related indicators: mainly output indicators but also outcome indicators).

As the objective of the ADVANCE-project is to develop an audit and QM scheme regarding the status of their SUMP and sustainable urban mobility policy we have to concentrate on systems dealing with the working process or a combination of working process and actual situation.

#### 7.3.1.1 Working process

In this group we find the following schemes:

- ISO 9000 family of standards;
- MaxQ: Mobility Management-scheme;
- BYPAD: Bicycle Policy Audit

MaxQ and BYPAD are interesting transport QM-schemes. These schemes do not only measure the status of the working process but support a **progress** and give the organization **tools for continuous improvement**.

The structures of BYPAD and MaxQ are all similar. They also have the same background. Interesting in the BYPAD-scheme is the regional aspect: the scheme is not only applicable for cities, but also for regions.

Both MaxQ and BYPAD contain a **development ladder**. In these schemes the quality of the processes in each of the elements are determined separately by assigning a quality level on a ladder of development to each of them (see Table 1). The ladder of development shows, at a glance, the overall quality level of at least the working processes in the organisation, and to some extent also the level of the outcome.
Table 1: Levels of development in MaxQ, BYPAD and MEDIATE - ISEMOA project

<table>
<thead>
<tr>
<th>MaxQ</th>
<th>BYPAD</th>
<th>MEDIATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5: total quality MM</td>
<td>4: integrated approach</td>
<td>4: integrated approach</td>
</tr>
<tr>
<td>3: system-oriented MM-approach</td>
<td>2: isolated approach</td>
<td>2: isolated approach</td>
</tr>
<tr>
<td>2: process-oriented MM-approach</td>
<td>1: ad-hoc oriented approach</td>
<td>1: ad-hoc oriented approach</td>
</tr>
<tr>
<td>0: no evidence of MM-approach at all</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.3.1.2 Working process and actual situation

There are not so many relevant QM-schemes actually covering both the organisations working processes (described by process-related indicators) and the actual situation in “real life” (described by status-related indicators).

As the field of sustainability is characterised by physical factors the ADVANCE scheme should cover the working process and the actual situation.

The Swedish handbook “Accessible City” deals with the working process and the actual situation. In Accessible City the 6 phases are included (see above). All phases 1-6 cover the process while phase 3 refers to covers the actual situation. The handbook provides a good guidance on how to conduct an inventory, especially on the micro level, and for some aspects even the meso level.

Also the Swedish Traffic Safety Audit deals with the working process and the actual situation. This audit has been used successfully in Swedish municipalities over a couple of years and is therefore very interesting when developing the ADVANCE-scheme.

In the same manner as MaxQ and BYPAD, the Traffic Safety Audit contains a type of ladder of development (Table 2).

Table 2: Dimensions and elements in the Swedish Traffic Safety Audit. Example of points (max in brackets) – ISEMOA project

<table>
<thead>
<tr>
<th>Category</th>
<th>Traffic safety “culture”</th>
<th>Traffic safety “status”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Actual level of traffic safety</td>
<td>-</td>
<td>1 (3)</td>
</tr>
<tr>
<td>2. Organisation and steering</td>
<td>4 (7)</td>
<td>-</td>
</tr>
<tr>
<td>3. Planning</td>
<td>2 (3)</td>
<td>-</td>
</tr>
<tr>
<td>4. Traffic planning, traffic safety measures</td>
<td>1 (4)</td>
<td>6 (13)</td>
</tr>
<tr>
<td>5. Maintenance of infrastructure</td>
<td>2 (3)</td>
<td>3 (5)</td>
</tr>
<tr>
<td>6. Vehicles, journeys etc</td>
<td>2 (4)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>7. External cooperation</td>
<td>2(4)</td>
<td>-</td>
</tr>
<tr>
<td>Total points</td>
<td>13 (25)</td>
<td>12 (25)</td>
</tr>
<tr>
<td>Total stars (max. 5)</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

7.3.2 Type of indicators covered in the QM-schemes

As a first distinction indicators can be divided into two categories (connected to the areas working process and actual situation):
- Process-related indicators
- “Status”-related indicators: output indicators - outcome indicators

The field of sustainability is characterised by physical factors. The ambition of the ADVANCE audit scheme should therefore not only be to assess the organisations working processes (process-related indicators) but also the actual status of the sustainability in the area (status-related indicators) and eventually the outcome of the work.

Essential for the success of all work, whether it is environmental management, mobility management work or work towards a sustainable transportation system, is the presence of vision, goals, programmes, routines for implementation and monitoring, and the work towards continuous improvements. Many questions in MaxQ could therefore be re-used with minor modifications in wording. But more elements will be needed as ADVANCE has to embrace all the different modes. Since BYPAD consists of fewer questions than MaxQ one might want to look into BYPAD to see whether it is possible to have fewer questions in ADVANCE than in MaxQ.

The Swedish Traffic Safety Audit is interesting because it has a very well-defined way of dealing with both “status”-related indicators (mainly output indicators but also outcome indicators) and process related indicators on whether the municipality has visions, goals, programmes, organisational and personnel means etc. Many Swedish municipalities have used the audit as a basis for creating a traffic safety plan (as with BYPAD). That idea may be of interest for the ADVANCE scheme as well, to be able to use the audit model as a basis for a sustainable transportation plan.

7.3.3 Interesting for ADVANCE

Energy Cities (Cités de l’énergie/EnergieStadt/Citta dell Energia from Switzerland) is extremely promising because it combines process, (including internal communication) and outputs with an externally led but initially internal self-assessment that can be elevated to one that features external audit and feedback. It assesses both the existence of processes, and their quality; it also assesses the existence and quality of outputs. It provides a system of advisors to provide feedback to municipalities and they are a separate group from the auditors who decide whether or not a label can be awarded. It offers to ADVANCE a pre-defined set of criteria to assess the quality of energy efficient mobility, and to an extent for process and communication – although these criteria are orientated towards energy saving and could perhaps be more generic in common with schemes such as CAF\(^9\). Nonetheless, it offers flexibility to municipalities in selecting the range of measures to satisfy criteria, and the pace at which they implement the scheme (although audits must take place once every 4 years). It also allows benchmarking between municipalities and awards two levels of label, normal and gold.

In general the CAF and EFQM\(^10\) have inspired a number of schemes such as BYPAD and MaxQ that offer a relatively ready-made and accepted structure for assessing the quality of processes in an organisation – so not only whether a process exists, but also its quality. Clearly, ADVANCE can learn from this approach. ISO9004 is also a QM-scheme that can potentially inspire ADVANCE as it offers as one way of improving quality self-assessment, and it also, as with CAF/EFQM, tries to assess the quality of a process as well as its existence. In addition there is a focus on ISO9004 on “needs and expectations of all relevant interested parties” - so there is a user perspective that is of interest to ADVANCE.

7.4 Labeling and certification

7.4.1 Thresholds for labeling

The greater proportion of the schemes reviewed do not award labels and thus, strictly speaking for the purposes of this report, are not labeling schemes. This is because, either, they are concerned solely

\(^9\) CAF: Common Assessment Framework
\(^10\) EFQM: European Framework for Quality Management
with benchmarking (e.g. Urban Transport Benchmarking scheme), or because they award a certificate to any organisation satisfying the required criteria. Only a few schemes therefore have "levels" of award and related labels. These include:

- The Brussels Ecodynamic scheme, which has one, two and three stars. To get three stars, organisations must show that they are actively managing all their environmental impacts, whereas for a lower award they can be more selective about which impacts they manage and to what degree.
- The European Energy Award, where there are two labels, standard and gold, the level for gold being a score of 75% compared to 50% for standard.
- PAS500, the UK standard for travel plans. Here there are Bronze, Silver and Gold awards – Bronze essentially meaning that an organisation has made a committed start to travel planning, whilst Gold reflects actual achievements in changing how people travel and continuing commitment to the travel plan.
- The new ISO9004 on Managing for the Sustained Success of an Organisation also recognizes different levels of achievement, according to one of the expert interviews and documentation he supplied.
- PROSE, a system inspired by the European Framework for Quality Management, is used to assess the quality management of organization active in the field of training and education in Belgium and has 500 registered user organizations. It has three levels of label, A, B and “Plus”.
- EFQM, the European Framework for Quality Management Excellence Model is an assessment framework that can be used to gain a holistic overview of any organization. It is primarily a quality management process but it features a recognition scheme and permits comparisons to be made with other organizations.
- Cités de l’énergie/EnergieStadt/Città dell’Energia, which has a basic level of achievement, and also the European Energy Award level of achievement.

7.4.2 Validity
As noted above, labels are not a feature of many of the schemes reviewed. However, for those that do have labels, these have been introduced in order to provide motivation to their users to strive for further improvement and/or (a related point) to make the achievement of a lower level of label easier, as an encouragement to "beginners" to participate. With regard to the issue of how long certificates and labels remain valid, where this is stated, the majority is valid for 2 to 3 years before reapplication is necessary. This period would strike a reasonable balance between minimizing the effort and cost of applying for the label whilst ensuring that organisations would not benefit from the positive image of something that they were in fact no longer doing.

7.4.3 Status of labeling schemes
In order to make a scheme well-used it has to be of clear benefit to the user – if this is the case, then it will be used even if it is relatively expensive. A financial benefit arising from the use of the scheme is likely to be the most effective incentive but other factors such as image or peer group pressure could also boost municipalities’ desire to be accredited by an ADVANCE label. Widespread use and take-up is also affected by the credibility of the scheme, which itself is related to factors such as the complexity of the scheme, the transparency of how it works, and the perceived quality of the auditors/assessors.

7.4.4 Set-up costs of labeling schemes
Of the labelling schemes listed in 7.4.1 Thresholds for they are run as follows:
- Brussels Ecodynamic is run by a not-for-profit company funded by the Brussels Capital Region (municipality).
- The European Energy Award is run by a not-for-profit company based in Switzerland, but it is also supported by national and regional energy agencies.
PAS500 was set up as an initiative of the UK’s Association for Commuter Transport (now ACT-Travelwise). It does not really have a body that runs and manages it although it has been drawn up to conform to the requirements of the British Standards Institute. It may as yet lack the “critical mass”

ISO9004 is of course run by the International Standards Organisation (ISO), which is a network of the standards institutes of 163 countries, some of them private, some of them publicly-owned.

However, it has not been possible to obtain information on the schemes’ set-up costs.

### 7.4.5 Interesting for ADVANCE

The PAS500 scheme is of interest for ADVANCE because it has a very clear definition of criteria that are required to be fulfilled for each of the three levels of label that the scheme awards.

ISO9004 has much to offer in relation to quality management. In relation to labeling, because it measures maturity levels of the organisation in relation to many criteria, it also offers the possibility of labeling in a relatively transparent way. From the point of view regarding ease of use and simplicity, ISO9004 offers the user an initial self-assessment route.

Brussels Ecodynamic is instructive in terms of its very clearly defined indicators and calculator for indicators which results in a score for each organisation’s environmental performance. However, the indicator calculator is quite “in-depth” and could therefore require considerable effort, and much data-gathering on the part of the organisation in order to fill it in correctly.

Energy City also appears to have much to offer in terms of labeling, as it has a two level award for certification. In particular, the scheme offers a great deal of support to users so that they know what is needed to get a label, and the label is based on a mix of process and output/outcome criteria. In terms of its organisation, also, it appears to be well set-up and be used by many Swiss municipalities.

### 7.5 Assessment and auditing

Most of the studied examples in the state-of-the-art review have an audit in place. The most developed and therefore interesting QM-schemes and audits are based on widely used and acknowledged QM-schemes, such as the ISO 9000 family and ISO 14 000 family.

As the MaxQ, BYPAD and the Swedish Traffic Safety Audit seem highly relevant to ADVANCE we will focus on these schemes when describing the audit procedure. It has to be noted that regarding MAXQ (as part of the MAX Mobility Standards), it follows the general ideas and concepts of the ISO standards.

#### 7.5.1 Audit procedure

In MaxQ the audit procedure is dependent on the ambitions of the city, the perceived current status of the QMSM, the level of political awareness about MM in the city and the feasibility in financial terms. In MaxQ there are five different procedures described starting from the least ambitious and least effort requiring and ending up with a very ambitious and more time and budget consuming one. The 5th level of audit results in a MM label. This label will remain valid for two years.

In BYPAD as well as in the traffic safety audit the audit has no division in different levels of ambition, i.e. as organisation (town, city, region) you cannot choose how extensive the audit should be, but the audit procedure is more or less the same. The audit structures for MaxQ, BYPAD (cities) and traffic
safety audit are shown in the table below. BYPAD has slightly different audit procedures for towns (e.g. only one meeting) and regions (e.g. three meetings).

<table>
<thead>
<tr>
<th>MaxQ</th>
<th>BYPAD</th>
<th>Traffic safety audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction meeting</td>
<td>For cities</td>
<td>1. Kick-off meeting with politicians and officials</td>
</tr>
<tr>
<td>3. Consensus meeting</td>
<td>2. Processing background information</td>
<td>3. Interviews – officials and politicians</td>
</tr>
<tr>
<td>4. Interviews with other partners/stakeholders</td>
<td>3. Questionnaire to evaluation group</td>
<td>4. Analysis and report</td>
</tr>
<tr>
<td>6. Final meeting</td>
<td>5. Meeting 1: Consensus meeting and site visit</td>
<td></td>
</tr>
<tr>
<td>7. Final report</td>
<td>6. Processing the assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Preparing the action plan meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Meeting 2: Preparation of the action plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Final evaluation report (including action plan and certificate)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Audit structures in MaxQ, BYPAD and Traffic Safety Audit

In the examples of QM-schemes reviewed, we see that all have some sort of internal audit in place but that not all of them also incorporate an external audit procedure or at least not in the starting years (BYPAD, CAF).

A number of QM-schemes (INK, Prose, CSE, Cité de l’énergie, EFQM, CAF) do have an external audit scheme in place but it is not the main focus of the QM-system. It is considered as a sort of extra offer to the more experienced QMS-applying (member) organisations that want to be publicly distinguished for their good performance and apply for a label or certificate.

In ISO based QM-Schemes like EMAS, the main focus is on the external audit part and the resulting certificate or label that gives access to a building permit or a reliable image towards clients and business partners, or any other benefit.

The audits, with focus on the internal audit are so called growth models. They pretty much focus on the dialogue within the organizations’ QMS, involving a critical mass of employees and other stakeholders to assess the QMS. Growth models prescribe a procedure for this internal audit and following the procedure in the right way is the key for improvement and also for rewarding a label. The external audit is an audit of the quality of the process of the internal audit and of the improvement plan set up and implemented.

7.5.2 Audit methods – collecting data

In comparison, the MaxQ method and the BYPAD method are slightly different. In MaxQ those involved must answer direct questions, in BYPAD on the other hand, statements.

In the MaxQ procedure, a questionnaire and a rating system is used in order to assess the quality of each of the elements. Overall this questionnaire is made up of about 90 questions split up into the 12 elements. The questionnaire and rating scheme are to be discussed among the MM-coordinator and
the MM-team. They are requested to fill in the questionnaire individually. All individual answers are collected, compared and summarized. Within the first meetings the group results are presented and differences in opinions are further discussed upon. The aim is to come to a consensus rating between 0 and 5 for all 12 elements.

In the next procedure, the assessments of the MM-team are taken as a baseline assessment which is further cross checked through individual or group discussions with stakeholders. This results in a refined rating of the 12 elements and adapted list of improvement actions. The next step is to come to an overall consensus with the MM manager and his/her team on the overall quality assessment based on the extended information and to select priority improvement actions from the proposed list. The last step is to communicate results to all stakeholders involved.

In BYPAD a questionnaire of 30 questions is also the main instrument for an audit. The evaluation group completes the questionnaire. The questions have to be answered separately by each evaluator him-/herself. Each question has several statements based on an interpretation of each level of development and the statement is answered with an “X” if the statement is fulfilled. Depending on which of the development levels most of the “X” are on, each question is assessed on the development level scale. During the consensus meetings, the different answers to the statements are discussed to seek a realistic grading of the different assessments and to find the same level.

There are different kinds of meetings to discuss or come to a consensus.

In CAF, BYPAD and Prose consensus meetings are a crucial part of the audit methodology. In these (internal) audit schemes, other methods like questionnaires, checklists and document analysis are used as information sources and evidence gathering in order to better prepare for the consensus meeting, which constitutes the main course of the audit.

In CAF and BYPAD, one particular meeting with the main auditee stakeholders (with the evaluation panel in the case of BYPAD) is dedicated to the drafting of an action plan or improvement plan for the auditee. During this meeting, all improvement actions that follow directly from the self-assessment exercise and/or that were suggested by the members of the evaluation panel are listed and prioritised and a realistic time scale is proposed. This process is moderated by the auditor. The auditor drafts the report of this meeting.

ISO based audits include an opening and a closing meeting with the auditee organisation. The aim of the opening meeting is to be sure that the organisation knows what to expect from the audit and how to prepare.

In most of the audit procedures reviewed site visits are appearing. There is however some variation in the role these visits play in the whole audit procedure. For example, in BYPAD the site visits (of about half a day) are used in the beginning of the audit procedure as part of the background information gathering by the auditor to better prepare him/herself for his role as facilitator in the consensus and prioritising meeting. In Cité de l’énergie, ISO, CAF-external feedback these site visits are used by the auditor to verify records and documents, to plan for personal interviews. These type of site visits are much more focused to a selection of evidence the auditor(s) want to have more clarification on.

We also see that the depth of the site visit (expressed in terms of time needed (and therefore also cost involved for the auditee)) depends on the sort of label strived after. This is the case for Prose and INK. Site visits are often planned in such a way that in a maximum two days all personal interviews with stakeholders, observations, meetings take place and all extra information at the site is gathered and verified.

The overall cost of an audit depends on the complexity of the auditee organisation and of the scope of the auditees activities to be audited. Sometimes, also a registration cost is requested as only
members of a QMS-network can apply for a label and this membership can be an annual membership fee (e.g. Cité de l’Énergie, Emas, Prose). In Ink and CAF, the membership is free of charge. Furthermore, distinction should be made here about the overall cost and its components of an internal versus an external audit.

7.5.3 Decision making process to award a label or certificate

In ISO and audit schemes that follow the audit guidance from ISO9011, the auditor decides autonomously upon rewarding a certificate based on the audit findings. The selection and evaluation of these certified auditors or audit organisations are part of a full audit programme in place. This audit program defines also the overall audit objectives, criteria, procedures, roles and responsibilities of persons responsible for managing the program, its processes and activities are monitored and reviewed at regular moments in time. The monitoring and evaluation of the auditors and their audit reports is an integral part of such an audit program and accreditation of the certification of the auditors is reconsidered on a regular basis. The national ISO and EMAS bodies have a list of all accredited auditors.

In the Swiss Cité de l’Énergie system, the auditor prepares an audit report. But it is a label commission that actually decides about the approval of this audit report and about the rewarding or withdrawal of the label to the city or municipality during a label session. The label commission is an independent controlling body within the association of Cités de l’Énergie. Its tasks and competences are described in its statutes. The regional spread in this label commission is preserved; its members contain sector-specific as well as more generic competences. The audit reports are sent to all label commission members in advance for self-assessment. In case of questions or doubts, the auditor is invited to the label session to give further information. It is not clear whether the label commission decides by consensus or majority voting.

In Prose, a team of Prose experts (the auditors) assess the auditee’s application file. If no consensus between the auditors is achieved, then the executive board of the Prose network decides about the label application.

Table 4 gives an overview of the actors that are involved in one or more of the audit procedures reviewed.

<table>
<thead>
<tr>
<th>Actors involved</th>
<th>Audit schemes reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. One certified (accredited) external auditor</td>
<td>Bypad, Cité de l’Energie, Emas</td>
</tr>
<tr>
<td>2. A project leader or internal auditor</td>
<td>CAF, Emas,</td>
</tr>
<tr>
<td>3. A team of auditors</td>
<td>INK, CAF external feedback</td>
</tr>
<tr>
<td>4. An accredited consultant or advisor</td>
<td>Cité de l’Énergie, EMAS</td>
</tr>
<tr>
<td>5. The management of the auditee organisation</td>
<td>all</td>
</tr>
<tr>
<td>6. A label commission</td>
<td>Cité de l’Énergie</td>
</tr>
<tr>
<td>7. A national certification body</td>
<td>CAF, ISO, Emas</td>
</tr>
<tr>
<td>8. QMS working group within the auditee’s organization</td>
<td>Cité de l’Énergie</td>
</tr>
<tr>
<td>9. A self assessment panel</td>
<td>Bypad, CAF, Ink, prose,</td>
</tr>
<tr>
<td>10. External stakeholders of the auditee organisation</td>
<td>CAF, Bypad</td>
</tr>
</tbody>
</table>

Table 4: Actors involved in audit schemes reviewed

The role of the management of the auditee organisation is important both at the start and at the end of the audit process. They need to support the audit plan in the beginning. In the end they need to agree with the audit report and make important decisions with respect to the prioritised actions in the improvement plan.
There is a clear distinction between the role of an auditor in an internal audit system versus the role of an auditor in an external audit system although in both cases independency and objectivity are a key issue.

In BYPAD (an internal audit scheme lead by an external certified auditor), the BYPAD manual specifies the role of the external auditor as follows: the auditor leads the session, debates and evaluates questionnaires. It is the auditor who creates the evaluation and improvement report. The auditor is supposed to maintain the balance between a cognitive approach (giving scores), a learning approach (he/she gives his/her expert opinion) and a conversational approach (discussion between actors).

Although not formally requested, the self-assessment process is often guided by an external consultant when done for the first time as the first audit often is the most difficult one. The main purpose here is to get the whole QM-scheme installed and accepted in the organisation. The idea is to organise the next self-assessments on their own, led by an internal auditor.

No label, however, is linked to adopting this self-assessment procedure adopted by an external consultant. Moreover, the consultant can be anyone who has experience in quality management systems. No accreditation is needed. Once the QM-scheme is installed and running, the organisation can apply for external feedback. Then however, an external accredited auditor (team) is needed to check the quality of the QM-scheme in place.

### 7.5.4 Audit reporting

In MaxQ, BYPAD, Prose the audit report has a pre-defined overall format. For example an audit report in the MaxQ-scheme should:

- follow the overall structure along the 12 elements;
- contain a main description of the evidence for each element;
- list the overall rating of the elements based on consensus between the audit group members;
- provide a justification of each rating and the description of the improvement action proposed;
- include a further elaborated shortlist of improvement actions based on a prioritizing exercise.

A BYPAD audit includes the same elements, but it also includes a final action plan with concrete objectives and actions (more detailed than the shortlist in MaxQ). This could be of interest for ADVANCE.

The Swedish Traffic Safety Audit is presented in a quite extensive report following a predefined structure:

- Status description
- Analysis and conclusions
- Declaration of intent and improvement actions

### 7.5.5 Quality assurance of the audit system

All decisions about certificates or labels rewarded to organisations are based on an audit done by a certified auditor. The body responsible for the designation of the auditors is basically the expertise network of the underlying QM-scheme which is either a private organisation for profit (s.a. Prose), a private organisation not for profit (like BYPAD, INK, the Swiss association of Cités de l’énergie) or a public organisation (CAF). In the case of supranational QM-scheme networks (like ISO, EMAS, CAF) the certification of auditors is a specific task of the national QM-scheme network partners or spin offs of the QM-systems. One exception is BYPAD which has no national network spin offs. The advantage of the national network partners taking care of this issue is that e.g.

- the national policy and educational context can be taken into account much better; in each country the necessary qualifications and expertise might be found elsewhere;
- the language barrier can be eliminated which makes it easier to monitor and evaluate the auditor’s work;
• In a national context, it is easier to detect conflicts of interests and violations against the independency request, because all stakeholders in the sector are better known.

The national QM-spin offs are also most often also responsible for the training of the auditors. Every auditee has to address its application for audit to the national QM-spin off first. This national QM-spin off will then provide a list of certified auditors the auditee can choose from, or sometimes it will assign an auditor or an audit team to the auditee itself.

7.5.6 Training

In the systems where information is available about the training of auditors, we see that a training course for certification of an auditor takes at least 2 to 3 days (BYPAD, CAF external audit).

About the content of the training programme:
• Theoretical part: philosophy of the underlying QMS and the audit objectives, criteria, procedures
• Introduction to the techniques and instruments of the audit procedure: how to use the data gathering methods e.g. site visits, questionnaires, document analysis,…
• Practical exercises: presentation of existing case studies + own case study development
• A virtual case/ role play, … to learn about and apply communication skills needed; how to facilitate a consensus meeting, what to do in the case of conflicts, …
• Theory and practice on how to write and present the audit report and action plan
• Overall information about the tasks and duties of an auditor: basics about the audit programme selection, evaluation, fees, .

The following structures and activities are meant for, or at least contribute to, the regular knowledge updates for auditors:
• Certified auditors have access to an internal part of the QM-network website in which good practice cases are documented, all tools, instruments, manuals are available.
• The CAF scheme has a supranational CADF-resource centre in place that acts as an overall expertise centre and feeds the promotion and implementation of CAF in the different countries; this resource centre regularly organizes EU-wide training open for different groups on specific topics;
• To meet the ISO standard, the external Auditor has to complete relevant training in order to be named as a Lead Auditor. Auditing and certifying against standards can only be done by a competent registrar and a certified Lead Auditor. However, completing a Lead Auditor Training course doesn’t provide a Lead Auditor credential. A Lead Auditor Training certificate is just a prerequisite for applying to a National Accreditation authority for evaluation. Before becoming a Lead Auditor, there are still professional requirements that must be met, including conducting a number of “verifiable audits,” educational requirements, work experience, and sponsorship by an actual accredited registrar.
• Every year, auditor network meetings take place where all auditors discuss their audit experiences (BYPAD); problems can be discussed and good practices can be exchanged. At this event, updates and changes to the instruments are communicated;
• QM-user events can take place on a regular basis (e.g. the CSE-standard); at these occasion, audit experiences by auditors and QM-user experiences can be exchanged;
• In a number of QM-and label schemes (e.g. Prose and Cité de l’energie), the certified auditor in one audit case can at the same time act as a certified consultant in another audit case; in this way, there are more opportunities to update knowledge and experience and from different angles;
• In some QM and label schemes, the auditor organisation (an experienced QMS-adopter) can even be external auditor in another case. (E.g. CAF-external audit );
• Working in audit teams (instead of with only an individual auditor) has the advantage of many opportunities to exchange experiences and learn skills from each other in different contexts;
• In the Dutch INK QM-system, all auditors are invited to take part at the site visits organized at the sites of the new labeled organisations.
7.5.7 Interesting for ADVANCE

Overall, the ISO19011 guidelines offer a very useful framework for ADVANCE to set up a complete audit system. It gives a clear overview of all the aspects an audit scheme should consist of from the definition of the audit procedures, the range of information gathering methods and audit steps, to the role, selection and evaluation procedures of the auditors.

CAF and Cité de l’Energie (EEA) are very informative for ADVANCE as both are supranational audit schemes and succeed very well in offering a credible system both in the national and in the supranational context with a clear distinction of roles between the two levels.

Prose, Cité de l’Energie and CAF are interesting schemes as they seem to integrate pretty well the role of auditing and expertise network. A city – or organisation in the context of Prose – is offered more than an audit of their current activities and outputs. The member city or organisation can take part in training, can download instruments that help them in installing a QM-scheme system, a list of accredited consultants can assist them in more specific tasks related to installing or conducting a quality management system. The role of accredited consultant is distinct from the role of accredited auditor although they the same people doing it.

INK and CAF-external feedback are interesting as both include the possibility of peer review: organisations are involved in the audit of a peer organisation which creates direct learning opportunities between cities or organisations.

BYPAD, CAF and MaxQ are inspiring schemes that use a combination of questionnaires, scoring schemes and a consensus seeking process as the main audit procedure. The auditor is more a facilitator here. Traffic safety audit and Cité de l’Energie are inspiring examples of audit schemes that use a checklist with a scoring scheme, site visit and individual interviews. The auditor here is mainly the verifier. In INK, CAF-external feedback, and Prose a team of auditors is in charge of the audit. All of them have either advantages or disadvantages regarding their credibility, costs and efficiency but all are interesting approaches that should be further investigated for ADVANCE.

7.6 Success factors and barriers

It is important for the ADVANCE-project to be aware of other schemes’ and audits’ success factors, problems and barriers, to help to avoid suffering similar pitfalls and/or reinventing the wheel. The following two sections will describe success factors and problems/barriers that were identified when the QM-schemes/audits were reviewed.

7.6.1 Success factors

A frequent mentioned success factors:

- some kind of labeling included in the QM scheme or audit, so that the organization can use this in promotion activities, e.g. on publications and printed matter, and as an evidence of quality towards the own organization and other organizations.

- a benchmarking that allows comparisons between cities that conducted the audit.

- new networks are created when many stakeholders work together for improving processes. Benchmarking allows organizations to compare themselves to others. This learning process can lead to contacts and, by extension, to important networks that may have a further positive influence on the organization’s development.

- The audit’s or scheme’s cost is an important factor influencing its success. Many comments concerned that the price should not be too high. At the same time ISO is the most expensive
scheme and the most widely used which probably is connected to the experienced benefit of being ISO certified.

- A **strong relationship to law**, or **support from official organizations/authorities**, is important for a scheme’s success. Without such support, even a QM-scheme provided for free will not be of sufficient interest to a potential user organisation.

- **Continuity or regularity** is another success factor. Continuous improvements need to be monitored and reinforced by follow-up visits/audits. These follow-ups can be required if the results/certification have limited validity.

- The **simplicity** of a QM-scheme. Despite the importance of simplicity, a certain depth and breadth of the scheme is needed to be successful. The right balance between simplicity and depth, e.g. as in BYPAD and MaxQ, is therefore of importance. As with the cost, the audit must be worth the effort that is needed.

- Schemes with a clear, **well defined scope** are furthermore also more successful than complex, broad-reaching audits. If the right balance between depth and simplicity is found (due to a well defined scope) the audit is attractive for potential users.

Further mentioned success factors are:

- Transparency
- Schemes based on well-known “products” (e.g. ISO 9001)
- Lower costs or better environment as a result of the audit/certification
- Support from specialized external organizations such as national road/transport administrations/departments, well-known consultants promoting and using the schemes, and auditors.

### 7.6.2 Problems and barriers

In many cases, the problems of QM-schemes or audits are the opposite of the success factors. In this respect, the following problems or barriers are typical:

- No relationship to the law
- No benchmarking
- The cost or the need to be profitable
- The **unofficial status**. If no official organization directly supports the audit, there can be difficulties in marketing the scheme.

- The audit’s **user-friendliness** can be a barrier or problem, if the scheme’s approach is too wide. This problem leads to difficulties in finding interested target groups. The audit might be interesting for many, but not as specialized as needed.

- The **follow-up**. If this is complicated (for example in relation to data gathering), the audit will not be simple enough to establish as a tool for continuous improvement. A risk of **stigmatization** of what is “good” and “bad” can be problematic; this issue has to be approached openly.

- The **motivation** of the audited organization is of importance. Without the commitment of all the stakeholders in the audit process, the implementation of the audit can be difficult.

- A **need for clear areas of responsibility** if many stakeholders are involved is another problem, connected to that of a lack of motivation.

- **Too large possibilities of interpretation**. That can be the case if too large parts of the auditing process are left to the audited organization or if the guidelines can be interpreted widely.

- **No external auditor/external validation** of the audit.

Further problems/barriers are:

- Voluntary follow-ups (single audits are also included here)
- Audits that are too time-consuming
8 Conclusions

8.1 Main results
The objectives of this part of the project that are reported here are therefore to see what we could learn from other schemes, as summarised under the following sub-headings.

8.1.1 What is a good SUMP?
SUMPS define a set of interrelated measures designed to satisfy the mobility needs of people and businesses today and tomorrow. They are the result of an integrated planning approach and address all modes and forms of transport in cities and their surrounding area.

An important result is that SUMPS should not be presented as an abstract concept, but as a practical tool that can help to improve planning.

The ELTISplus project defined three dimensions of a Sustainable Urban Mobility Plan:
1. Plan making (process): the core of the methodology
2. Plan (content of the document): beyond providing a plan outline, putting focus on actual examples of effective measures
3. Policy (implementation process of the plan and its final appraisal): a new element to facilitate implementation

Cities that catch the eye in Europe due to their approach to sustainable mobility and keep doing so year after year usually pay a lot of attention to every step and aspect of the policy cycle. In doing so, this policy cycle becomes a circle of success.

Different approaches to sustainable urban mobility planning exist throughout Europe. The benefits and added value of Sustainable Urban Mobility Plans need to be communicated to decision-makers, planners and other urban mobility stakeholders to encourage their preparation and implementation. Municipalities may consider these plans as yet another plan on the urban agenda. Therefore, it is important to emphasize that Sustainable Urban Mobility Plans build on and expand existing plan documents.

There are a number of benefits associated with Sustainable Urban Mobility Plans. These include:
- Better quality of life
- Environmental and health benefits
- Improved mobility and accessibility
- Improved image of a city
- Potential to reach more people
- Citizen- and stakeholder-supported decisions
- New political vision
- Integration potential
- Improving a city’s competitiveness and access to funding

8.1.2 How do QM-schemes function, and how well are they used?
The report has already highlighted a great deal of commonality between the QM-schemes reviewed. This is unsurprising since many of them have a common parentage, going back to EFQM; otherwise, ISO-type systems predominate. They are all based around a set of criteria that define quality, evidence of which has to be provided by an organisation if it is deemed to have reached the required level of quality.
Benchmarking schemes are more disparate in approach in that different indicators are selected in each scheme.

A small number of QM schemes also gather data on outputs and outcomes as well as the processes that the organisation in question follows. Two in particular stand out, which are the Swedish Traffic Safety Audit, and the Swiss Energy City scheme.

In terms of how well they are used, it is relatively difficult to acquire information about this, as schemes will not advertise whether they are used, or make the distinction between those that have registered for a scheme, as opposed to those that have actually used it. Of the directly transport-related QM schemes reviewed (BYPAD, MaxQ and PAS500), BYPAD has the most users, with slightly over 100 cities having had at least one audit. MaxQ and PAS500 have been relatively little used at the moment but both are quite new.

8.1.3 Are there schemes that do as much as ADVANCE seeks to do?

The ambitions for the ADVANCE scheme are aspiring to:

- Cover process, outputs and/or outcomes – but preferably all three.
- Allow comparison/benchmarking between very different cities right across a continent.
- Award labels to recognize achievement of a certain level of quality in process, outputs and/or outcomes.

There are no schemes reviewed that do all of these things. Most either benchmark, or cover process and award labels. The closest is probably the Swiss Energy City scheme as it covers process, outputs and outcomes, allows benchmarking, and awards labels at different levels of achievement. However, its scope is currently limited to Switzerland – although there is nothing to suggest that the scheme itself could not function on an international basis and indeed it already feeds into an international scheme, the European Energy Award.

8.1.4 Are there key problems that we anticipate that others seem to have overcome, and any problems that no-one has overcome?

The following problems could be anticipated with the development of the ADVANCE scheme:

A process that is perceived to be too time-consuming, complex or expensive, so the scheme is not used

It is impossible to judge objectively whether most of the schemes reviewed here have encountered this obstacle. One that probably has includes, according to one interviewee, PAS500; and also according to another interviewee, EFQM. However, no record is kept of the number of people who consider implementing a scheme but then do not because they perceive it to be too complex. This issue can be addressed in three ways by ADVANCE:

- through the collaboration of the ADVANCE-cities, who will give feedback from their municipalities to inform how simple a scheme they want,
- by making the scheme as relevant and useful to municipalities as possible – even if relatively complex, a scheme that is perceived as worthwhile will be used (a point made by several interviewees),
- by including different levels of assessment within the scheme, as with MaxQ and other existing schemes.

The scheme lacks credibility

There are a number of ways of building up and enhancing the scheme’s credibility:

- if the scheme itself is ISO accredited, this can give some confidence as to its quality and rigor,
- the schemes with the greatest credibility, and use, are those linked to a national or supranational accreditation body – so EFQM and ISO,
- the profile of BYPAD has increased over time, it has been evolving over more than a decade since the first project began.
• Linking accreditation and/or labeling to the receipt of funds or approval from a higher level of government or other authority, as was the case with the Swedish Traffic Safety Audit.

It proves impossible to combine an assessment of process with some measure of outputs/outcomes, and indicators are difficult to measure

Energy City, the Swedish Traffic Safety Audit, and the Brussels Ecodynamic Label show that these can be combined in one system. It is not clear at present whether in a field as wide as mobility, this combination can also be achieved – it is a task of ADVANCE to work out whether it is. However, energy use is, arguably, an even broader field and the Energy City scheme appears workable and credible. The problem of obtaining comparable data on output and outcome indicators can be addressed by assessing them qualitatively, although this may be judged to be a sub-optimal solution compared to having actual numerical data on, for example, provision of bike or bus lanes. The next task in WP2 of ADVANCE deals with the presentation of indicators and data availability in much more detail and then draw conclusions as to the desirability of a more quantitative or qualitative approach to their measurement.

From the review of schemes it is clear that schemes require an organisation to run them – this could be termed, potentially, an ADVANCE expertise team, whose role would be:

• Role as expertise centre: overall building further expertise on QM-schemes and supporting materials (particularly in the early years of the scheme),
• Overall promotion of the QM-scheme annex label scheme,
• Managing the database of ADVANCE-users, registration of new member cities,...,
• Monitoring and evaluation of ADVANCE–user internal assessment reports, feed-back and review of the QM-scheme,
• Info and training sessions open for any interested stakeholders (cities and consultants),
• Auditor training sessions that give access to certificate as ADVANCE-adviser and auditor,
• Monitor and evaluate work of ADVANCE advisers and auditors,
• Keeping list of certified advisers and auditors and assign auditor teams to cities.

8.2 Most relevant projects for ADVANCE

The next table provides a synthesis of the main contribution for ADVANCE as well as the potential domains of collaboration, for the projects that have been assessed as "high" or "exceptional" by the ADVANCE consortium, based on their experience and expertise opinion in line with the main objective and purpose of the ADVANCE project.
<table>
<thead>
<tr>
<th>Project</th>
<th>Relevance of results</th>
<th>Main input for ADVANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot</td>
<td>☑️ ☑️ ☑️</td>
<td>ADVANCE will transfer some of the 5 tasks and the 10 missions into the ADVANCE Audit Scheme. ADVANCE will go one step further and develop an audit scheme focusing on its main elements and allowing cities to have the ability to also put short-term measures into action.</td>
</tr>
<tr>
<td>MAXD</td>
<td>☑️ ☑️ ☑️</td>
<td>ADVANCE will work further on the 12 elements or quality criteria that have been developed within MAX. Also, the code of practice for implementing quality in the mobility policy of small and medium-sized cities is a useful document to start from. ADVANCE will mainly conduct the ADVANCE Audit Scheme with external auditors. This was a lesson learnt from MAX and directly taken on board.</td>
</tr>
<tr>
<td>BUSTRIP</td>
<td>☑️ ☑️ ☑️ ☑️</td>
<td>Apart from the lessons learned on how to develop SUTPs, the evaluation of the peer review methodology gives interesting input for ADVANCE. Also, the key recommendations about how to implement a SUTP will be considered when designing the ADVANCE Audit Scheme.</td>
</tr>
<tr>
<td>BYPAD</td>
<td>☑️ ☑️ ☑️</td>
<td>The BYPAD method has proven to be a perfect method to integrate stakeholders into a quality management process and to start a long-lasting communication process. ADVANCE will therefore orientate itself on the BYPAD method and will also strongly build on the experiences, which have been made over the last few years within BYPAD. The final output of the ADVANCE Audit Scheme will be an action plan and one of the proposed actions can be BYPAD.</td>
</tr>
<tr>
<td>EcoMobility Shift</td>
<td>☑️ ☑️ ☑️</td>
<td>The review of existing QM and labeling schemes will directly be used to define the structure of the ADVANCE audit scheme. The ADVANCE consortium will be in constant interaction with this parallel running project. While ECOMOBILITY SHIFT is aiming for a labeling scheme for cities, ADVANCE will go one step further as it aims to produce an audit scheme with concrete action plans at the bottom line.</td>
</tr>
<tr>
<td>Isemoa</td>
<td>☑️ ☑️ ☑️</td>
<td>The compilation of QM schemes and audits will directly be used to define the structure of the ADVANCE audit scheme. ADVANCE will make use of the already identified multipliers. These multipliers will be directly contacted by ADVANCE and invited to join one of the ADVANCE training sessions.</td>
</tr>
<tr>
<td>ELTISplus</td>
<td>☑️ ☑️ ☑️</td>
<td>ADVANCE will take advantage of the ELTIS-PLUS training sessions in all EU member states and will raise awareness of the audit scheme through these training sessions. But ADVANCE will use the SUMP elements and activities (process of a SUMP) defined in ELTISPLUS as a framework for the audit scheme. While ELTIS-PLUS aims to disseminate the definition of a SUMP, ADVANCE is more practically oriented as it plans to guide cities through the audit scheme and concludes with defining an action plan with concrete measures.</td>
</tr>
<tr>
<td>Sustainable Mobile Cities</td>
<td>☑️ ☑️ ☑️</td>
<td>The ideal policy cycle or circle of success contains all the relevant steps needed to define both sustainable vision and strategy in policies and finally to implement and assess these. The circle of success in combination with the 14 recommendations are important elements in defining what is a good SUMP.</td>
</tr>
<tr>
<td>Measuring sustainability of transport in the city -- development of an indicator-set (University of Lund)</td>
<td>☑️ ☑️ ☑️</td>
<td>The indicator framework to monitor sustainability in cities will be used as a basis to develop an indicator set of the ADVANCE Audit Scheme.</td>
</tr>
<tr>
<td>EPOMM-PLUS</td>
<td>☑️ ☑️</td>
<td>EPOMM-PLUS can be important for the dissemination of the ADVANCE Audit scheme.</td>
</tr>
<tr>
<td>Mediate</td>
<td>☑️ ☑️</td>
<td>Although focused on public transport, the developed tools might contribute much to the ADVANCE Audit Scheme.</td>
</tr>
<tr>
<td>Competence</td>
<td>☑️ ☑️</td>
<td>The Competence training content can be important defining the training the external auditors. The next, similar project on capacity building for sustainable transport is TRANSPORT LEARNING. The project started in May 2011. It does not focus on SUMP and audits, but training materials on eight topics (walking &amp; cycling, mobility campaigns, communication training, PT, street design, land use &amp; housing, measures for families and children as well as parking space management) will be developed. Maybe it will be important for the design of the Audit.</td>
</tr>
<tr>
<td>BENEFIT</td>
<td>☑️</td>
<td>The focus is more on measures for companies than for individuals. The project is not so relevant for ADVANCE.</td>
</tr>
<tr>
<td>Niches+</td>
<td>☑️</td>
<td>The project does not specifically include the development of a scheme, or of indicators to define the sustainability of a city.</td>
</tr>
<tr>
<td>Civitas</td>
<td>☑️</td>
<td>The categories of measures can inspire defining actions and measurements for implementation and improvement. ADVANCE city Malmö participates in CIVITAS SMILE.</td>
</tr>
<tr>
<td>ASTUTE</td>
<td>☑️ ☑️</td>
<td>The booklets can give inspiration to overcome the barriers, especially for walking and cycling, by defining the indicators in the ADVANCE audit scheme.</td>
</tr>
<tr>
<td>Energy City</td>
<td>☑️ ☑️ ☑️</td>
<td>Very informative for ADVANCE as it is a supranational audit scheme and succeed very well in offering a credible system in the national and the supranational context with a clear distinction of roles between the two levels. It covers process, outputs and outcomes; allows benchmarking; and awards labels at different levels of achievement. For the moment, its scope is limited to Switzerland.</td>
</tr>
<tr>
<td>Swedish traffic safety audit</td>
<td>☑️ ☑️ ☑️</td>
<td>Traffic safety audit and Cité de l’Énergie are inspiring examples of audit schemes that use a checklist with a scoring scheme, site visit and individual interviews. Both QM schemes also gather data on outputs and outcomes as well as the processes that the organisation in question follows. That might be very useful for ADVANCE.</td>
</tr>
</tbody>
</table>
9 Appendix A: Reviewed projects and schemes

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>Accessible City</td>
<td>A Dutch quality management system which claims to maximise efficiency and profitability and minimise the negative impact on the environment. A handbook for cities to develop an accessible city plan. The handbook supports strategic planning. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. This handbook offers municipalities the opportunity to develop an accessible city plan and network. The handbook aims to establish a systematic approach in planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources.</td>
</tr>
<tr>
<td>JU</td>
<td>Euroleg</td>
<td>A common European quality management instrument for the public sector. ISO 9001:2008 The ISO standard applied to a local public transport company. The other standards and guidelines in the family address specific environmental aspects, including: labeling, performance evaluation, life cycle analysis, environmental management systems (EMS). ISO 14001:2004 provides the requirements for an EMS and ISO 14004:2004 gives general EMS guidelines. These guidelines have been designed to provide best practice advice on how to carry out an access audit. They have been developed in collaboration with the Office of Public Works and the Department of the Environment, Heritage and Local Government. They include background information on access auditing, and a framework for an audit and the typical structure of an audit report. The guidelines also offer advice on access auditing. They have been developed in collaboration with the Office of Public Works and the Department of the Environment, Heritage and Local Government. They include background information on access auditing, and a framework for an audit and the typical structure of an audit report. The guidelines also offer advice on access auditing.</td>
</tr>
<tr>
<td>EU</td>
<td>BREEAM Communities</td>
<td>A new national and international audit scheme for the certification of sustainable buildings. BREEAM Communities is an international scheme; The &quot;Flag of Towns and Cities for All&quot; offers to municipalities the opportunity to join a growing group of towns and cities that have chosen to implement sustainable urban development policies. The scheme is the result of an initiative by the European Commission, aiming to promote accessibility for people with disabilities in accessible transport, public space, transport and related infrastructure, information and communication, including Information and Communication Technologies (ICT), and public facilities and services taken from website (May 2010). The scheme commences on 1st October 2009. A new European Award for Accessible Cities has been launched by the European Commission, aiming to promote accessibility for people with disabilities in accessible transport, public space, transport and related infrastructure, information and communication, including Information and Communication Technologies (ICT), and public facilities and services taken from website (May 2010). The scheme commences on 1st October 2009.</td>
</tr>
<tr>
<td>NL</td>
<td>INK-model</td>
<td>A Dutch quality scheme based on EFQM, open for all types of organisations including public sector (cities/minicipalities) and organizations. The INK-model (stands for Instituut modelINK (Dutch Quality Institute) Management) is a model for the implementation of the EFQM excellence model. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources. It is based on an EU-research project and can be used as an input for a wider project on accessibility networks. The handbook aims to reveal a systematic approach to strategic planning for accessible cities, to gain necessary support among actors involved, and to maximise benefits of involved resources.</td>
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<tr>
<td>Country</td>
<td>Title</td>
<td>Description</td>
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<tr>
<td>IE</td>
<td>PAS 55</td>
<td>Pilot focusing severe traffic. Pilot develops a model: Assessing traffic and learning reasons for the maximisation of traffic and to transport plans in urban and local authorities. It described the benefits for SUMPS.</td>
</tr>
<tr>
<td>IE</td>
<td>Placecheck</td>
<td>A DIY community-based place audit. Audit to analyse and make recommendations for improving the street environment and public spaces.</td>
</tr>
<tr>
<td>BE</td>
<td>Stadsmonitor (Flemish city monitor)</td>
<td>Actively used among the 13 largest cities in Flanders to benchmark against one another.</td>
</tr>
<tr>
<td>CZ</td>
<td>Safety Audit</td>
<td>audit of project documentation focusing on safety of new constructions (or reconstructions) from the point of view of pedestrians, cyclists and PMR</td>
</tr>
<tr>
<td>PL</td>
<td>Road Safety Audit</td>
<td>The goal of the audit is to deliver the reliable and objective knowledge on road safety for driving schools about its strengths and weaknesses, authorities in order to improve and promote the best driving schools, public opinion about driving schools quality.</td>
</tr>
<tr>
<td>ES</td>
<td>National Team audit “Promax†</td>
<td>The evaluation describes a user-centred approach to improving road environment design. This approach involves evaluating challenges which are currently in need to learn how the current users actually interact with and use the building (both from a functional and a user-satisfaction perspective), and subsequently to eliminate them.</td>
</tr>
<tr>
<td>ES</td>
<td>EN ISO 9001:2009</td>
<td>This quality management scheme is a management instrument which includes a systematic, objective and documented evaluation of the effectiveness of the prevention system of the companies in order to ensure safety and health for their workers in the development of their daily activities.</td>
</tr>
<tr>
<td>ES</td>
<td>Traffic Safety Audit</td>
<td>It is a complex analysis of the impact of road in usual or other road modifications on road safety and analysis of the real road safety situation. The tool is based on a standardized systematic and technical control of the road infrastructure. The purpose of each audit is to assess road safety through removing road design project or internal control issues depending on the road construction and reducing the number of casualties as well as reducing costs related to road use and improved driving conditions.</td>
</tr>
<tr>
<td>ES</td>
<td>STN EN ISO 5001-2008</td>
<td>It is a quality management scheme that promotes the adoption of process approach in the development, implementation and improvement of effective quality management systems in order to increase customer satisfaction by the fulfillment of their requirements.</td>
</tr>
<tr>
<td>ES</td>
<td>Environmental Impact Assessment System (EIA)</td>
<td>This system for the urban environment according to the legislation and the demand of the PMM applied in any case of improving building on an area that has to be accessible to PMM.</td>
</tr>
<tr>
<td>ES</td>
<td>Sustainability Action Plan - SEAP</td>
<td>The results of the Baseline Emission Inventory to identify the best areas of action and opportunities for reaching the local authority’s温室气体 reduction target. It defines concrete reduction measures together with time frames and assigned responsibilities which translate the long-term strategy into action.</td>
</tr>
<tr>
<td>ES</td>
<td>Sustainable Energy Action Plan - SEAP</td>
<td>A key report, describing progress made in cutting CO2 emissions, has to be sent to EU.</td>
</tr>
<tr>
<td>NL</td>
<td>Sustainable Energy Action Plan - SEAP</td>
<td>The results of the Baseline Emission Inventory to identify the best areas of action and opportunities for reaching the local authority’s温室气体 reduction target. It defines concrete reduction measures together with time frames and assigned responsibilities which translate the long-term strategy into action.</td>
</tr>
<tr>
<td>NL</td>
<td>Sustainable Energy Action Plan - SEAP</td>
<td>The report on measures and the role of sustainable energy policy in European policy makers as the main element of national and local policies must be one of the key factors for an integrated sustainable urban mobility plan and policy.</td>
</tr>
<tr>
<td>NL</td>
<td>Sustainable Energy Action Plan - SEAP</td>
<td>The analysis is rated for all of the seven themes and for both traffic safety standard and traffic safety culture. The maximum overall score for each main aggregation (standard and culture) is described by 5 stars.</td>
</tr>
<tr>
<td>NL</td>
<td>Sustainable Energy Action Plan - SEAP</td>
<td>This Audit supports the European Union’s Sustainable Energy Action Plan (SEAP) to reduce CO2 emissions. It defines concrete reduction measures together with time frames and assigned responsibilities which translate the long-term strategy into action.</td>
</tr>
</tbody>
</table>
| NL      | Sustainable Energy Action Plan - SEAP     | The Traffic Safety Audit helps municipalities to secure the quality and development of traffic safety. The work with the Audit is done by professional consultants/auditors who have key figures and interviews with responsible persons analyzing the strong and weak points in the municipalities traffic safety work. The Traffic Safety Audit analyses the traffic safety culture and the traffic safety standard. The analysis and evaluation is done for seven themes for both the traffic safety culture and traffic safety standard. These themes are:  
  - Actual level safety
  - Organisation and management
  - Physical planning
  - Traffic planning, traffic safety measures and local traffic rules
  - Operation and maintenance
  - Vehicles, journeys and transport
  - External cooperation
  - The analysis is rated for all of the seven themes and for both traffic safety standard and traffic safety culture. The maximum overall score for each main aggregation (standard and culture) is described by 5 stars.                                                                                                                                                                                                                                                                 |
| DE      | Assessment of the quality of public transport services | This Audit is based on the cycle of the Quality of Service from the client and the administration and operation point of view. The objectives of the scheme are to increase quality, to determine the needs and expectations of users, to enable the service available, to provide added satisfaction to the client and to establish the quality criteria among the different concessionaires. The scheme helps also to promote and incorporate the quality concept in public procurements and projects.                                                                                                                                                                                                                   |
10 Appendix B

10.1 Minutes workshop 1: role play about Sustainable Urban Mobility Plans (SUMPs)

<table>
<thead>
<tr>
<th>PRO</th>
<th>CONTRA</th>
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</thead>
<tbody>
<tr>
<td><strong>General issues about Sustainability</strong></td>
<td><strong>More funding for infrastructure measures</strong></td>
</tr>
<tr>
<td>• Cities have transport related problems which have to be solved (not enough cyclists, too little bus stops, noise, air pollution, congestion, accidents etc.)</td>
<td>• Economic concern that there might be less turnover for shops in car free zones</td>
</tr>
<tr>
<td>• People want to live in a green area and not beside a highway; a city with more cars is getting less attractive → improve quality of life</td>
<td></td>
</tr>
<tr>
<td>• Less external costs because of less cars</td>
<td></td>
</tr>
<tr>
<td>• Interest of Planning: to integrate different requirements and solutions with a benefit to everybody</td>
<td></td>
</tr>
<tr>
<td><strong>Specific role of the SUMP</strong></td>
<td></td>
</tr>
<tr>
<td>• Integrates all modes of transport</td>
<td>• Expensive to create a plan</td>
</tr>
<tr>
<td>• Long and middle term strategy</td>
<td>• Measures are not compulsory</td>
</tr>
<tr>
<td>• Involve different interest groups (NGO, politicians, citizens etc.)</td>
<td>• Frame conditions might change</td>
</tr>
<tr>
<td>• Communicative process</td>
<td>• Difficult to measure the outcomes of a SUMP</td>
</tr>
<tr>
<td>• Exchange of knowledge with other cities</td>
<td>• Some cities are too small to implement a SUMP</td>
</tr>
<tr>
<td>• Focus not only on infrastructure but also on soft measures</td>
<td>• Results are long term and cannot be seen within the next (ten) years</td>
</tr>
<tr>
<td>• Opportunity to cooperate with other city departments (e.g. health department, housing, land use etc.)</td>
<td></td>
</tr>
<tr>
<td>• Better cooperation between interest groups through SUMPs</td>
<td></td>
</tr>
</tbody>
</table>

10.2 Minutes workshop 2: group work on Audit Schemes for SUMPs

**SUMPs**

- What are the existing definitions of SUMPs?
  - A SUMPS is an integrated planning document, covering several topics related to mobility, financial commitments, calendar of implementation, pre-operational approach.
  - Some cities have a mobility plan, an energy plan, a transport plan or a similar thing → difficult to assess for cities if this is a SUMP or not!
What are the common criteria / building stones of an integrated SUMP?
- environmental assessment
- citizen participation
- outcomes of pre-diagnostic studies
- scenarios
- outcome of a process which can take up to two years of work

Are there differences between countries / regions (EU / outside EU)?
- In France obligatory for cities with more than 100,000 inhabitants (72 cities in France)
- Poland, Slovakia, Austria, Slovenia: no national framework to put in SUMPs
- Spain: In Catalonia there is a legal framework (for cities < 10,000 inhabitants)

Are there guidelines in some countries for developing SUMPs?
- CERTU has developed a guideline about how to develop a SUMP. (only available in French)
- The Flemish region has a handbook for mobility plans: they have a regulation that you only get funding if you have a mobility plan

Auditing and Certification
- Which auditing and certification models and schemes in the field of sustainable urban mobility do exist?
  - Projects working on this issue are MAX, BUSTRIP, BYPAD, ISEMOA, Eco-mobility shift, QUEST
- What kinds of methods are used for collecting the necessary data for auditing SUMPs and mobility policies?
  - Use of questionnaires to get quantitative and qualitative information
- Interviews with municipality (gain knowledge about the progress of the Audit and about the insights of the implementation process)
- Modal split is a bad indicator to compare cities in different countries, but it can be a good starting point to find out the status quo of a city
- Description of level of development is a core element in the Audit
- Does the ADVANCE Audit only have to look at the procedure of implementing a SUMP or also at the impacts and the performance of the SUMP?