

Review of the Action Plan on Urban Mobility

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Final Report

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LIST OF ABBREVIATIONS

Abbreviation	Description
APUM	Action Plan on Urban Mobility
ARS	Access Restriction Schemes
CSA	Coordination and Support Action
CSF	Common Strategic Framework
EC	European EC
EEO	European Electro-mobility Observatory
EGCI	European Green Cars Initiative
EMW	European Mobility Week
EP	European Parliament
EU	European Union
FCH JU	Fuel Cells and Hydrogen Joint Undertaking
FP7	European 7 th Framework Research Programme
HEPA	Health enhancing physical activity
ICT	Information communication technology
IEE	Intelligent Energy Europe
ITS	Intelligent Transport Systems
LEZ	Low Emission Zones
NGO	Non governmental organisations
PT	Public transport
SEAP	Sustainable Energy Action Plan
SUMP	Sustainable Urban Mobility Plan
TEN	Trans European Network
URP	Urban Road Pricing Schemes

1 Introduction

In 2007 the European Commission (EC) presented the Green Paper 'Towards a New Culture for Urban Mobility'. This Green Paper marked the starting point for a broad consultation process with all relevant stakeholders involved in the possible role the EU could have and the possible actions it could take. The consultation confirmed the added value of EU-level intervention in a number of urban transport-related areas. As a consequence, the EC published an Action Plan on Urban Mobility (APUM) in 2009, with 20 concrete EU-level actions to be implemented by 2012. The implementation of the 20 actions of the 'Action Plan on Urban Mobility' is now drawing to a conclusion.

The EC announced that it would conduct a review of the Action Plan, following its implementation. This review was carried out by Panteia and partners (Isis, PWC and TNO). The purpose of the review of the APUM was as follows:

- To provide an overview of what has been achieved with regards to the 20 actions of the APUM and to summarise the main findings;
- To provide input to possible packages for EU action, which have emerged from specific EU initiatives. An example is the White Paper on Transport 2011, studies of the APUM, CIVITAS, ITS Action Plan and Smart Cities.

The starting point for the present review is the Action Plan itself. It is the benchmark for this review which has been carried out in three consecutive steps: (1) In the first step of the review we have analysed how the actions have been implemented, with the EC paper '*The action plan on urban mobility – state-of-play*'¹ as the main source. Additional data has been gathered through desk research.

(2) The second step of the review analysed how stakeholders received the APUM as such. The stakeholder's responses to the APUM were retrieved from desk research (internet) and a stakeholders' survey. In the survey, stakeholders were invited to upload their reactions to the APUM – if any – since its initial implementation in 2009.

(3) The third step of the review focused on the stakeholder's perspectives and views on the implementation of the APUM actions by the EC. This was conducted by a web-based questionnaire. The survey was accessible on the Internet between the 18th of June 2012 and the 7th of September 2012. This questionnaire is attached in Annex 1.

There were also other important sources for stakeholder's perspectives on the EC's implementation of the APUM actions and recommendations for possible packages for EU action. These included the White Paper on Transport 2011 and studies launched under the APUM, CIVITAS, ITS Action Plan and Smart Cities. In addition, conferences and meetings were an important source. We participated in the '10 years of CIVITAS' Conference in Brussels (17th of September 2012) and were involved in the preparation of the **Urban mobility Package** where we

¹ http://ec.europa.eu/transport/themes/urban/urban_mobility/action_plan_en.htm

presented the (preliminary) main findings of the review of the APUM and collected general stakeholder comments and impressions during the stakeholders and expert meetings on:

- City logistics (5th of December 2012);
- SUMP (29th of January 2013)
- Access Restrictions (5th of February 2013).

1.1 Structure of the report

Chapter 2 describes how stakeholders received the Action Plan on Urban Mobility (as such). Chapters 3 to 8 present the detailed results of the review for each of the Actions of the APUM, clustered together at theme level. Chapter 9 describes the findings of what has been achieved with regards to the 20 actions of the APUM, the overall findings and recommendations for possible EU actions.

2 Reactions of EU institutions and stakeholders to the APUM

This chapter describes the opinion of EU institutions before or on the APUM as well as reactions from stakeholders on the APUM.

2.1 European institutions

The **European Parliament (EP)** issued an own-initiative report for an action plan on urban mobility before the EC's Action Plan had been launched. In view of time limits imposed by European elections in that time (2009) the EP decided to draw up *ex nihilo*, its own-initiative report on an action plan². The opinion of the EP at that time contained elements which are still relevant for current and future EU actions. The EP showed appreciation on the cooperation between EU and Member States in this area:

"whereas urban transport constitutes a considerable proportion of all transport, with the legal basis therefore constituted by Articles 70 to 80 of the EC Treaty granting the European Union shared competence with the Member States in that field"

The EP made several recommendations in her report:

"Recalls that urban transport is subject to the subsidiarity principle, but nevertheless stresses that local authorities often cannot meet these challenges without European cooperation and coordination, so that the EC must provide studies and a legal framework, finance research, and promote and disseminate best practice on the principle that it should be available to everyone in all EU languages;"

And

"Asks the EC to publish a compendium of binding European regulatory provisions in this area and offer regions and cities a common frame of reference to make it easier for them to make choices as regards the planning and implementation of development strategy; "

Other statements and recommendations from this document are:

- *Recommends the introduction of integrated sustainable urban travel plans comprising:*
 - *mobility indicators and targets and an assessment of their economic, social and environmental impact*

1. <http://2www.europarl.europa.eu/sides/getdoc.do?language=En&reference>

- *a plan for the development and interconnection of transport networks coordinated with the regional transport plan and urban planning policies*
- *a plan for the development of soft infrastructure fully integrated with public transport*
- *a masterplan for urban logistics*
- *a programme for adapting management of urban mobility networks and their interconnections to the needs of reduced mobility users*
- *a procedure by direct participation by the general public*
- *A permanent European forum on urban transport governance for representative transport-organising authorities (including citizens and user organisations and professional federations of transport operators) in order to promote the exchange and dissemination of best practices*
- *European financing in the field of urban transport to be made conditional on the existence of integrated urban mobility (urban travel) plans*
- *Launch of a programme for the upgrading of statistics and databases on urban mobility*
- *Examine possibilities under the 2014-2020 financial perspective of a European financial instrument for urban mobility (integrated programme of the Marco Polo type) enabling the co-financing of surveys of urban travel plans.*
- *Strict respect for the principle of subsidiarity. However, the EU has the right to add value to local decisions, to encourage urban transport to help achieve the general objectives of its policy on environmental protection and combating climate change.*

The European Economic and Social Committee (EESC) welcomed the APUM in May 2010³, offering local, regional and national authorities ways of providing the best possible, most sustainable quality of life in urban areas. However, the EESC states that *'the EC's proposals in this APUM plan fall far short of the recommendations made by the EESC in previous opinions on urban mobility and 'most of the measures advocated by the EC represent nothing more than well-intentioned – albeit certainly quite praiseworthy – advice, and are far from being binding or revolutionary'*⁴. In addition, the EESC states that *'The action plan under consideration should at least be accompanied by measurable quantitative targets based on a set of indicators which cities and peri-urban areas should endeavour to achieve by means of sustainable mobility plans they have chosen themselves'*. In the EESC's view, the APUM needs to be complemented by another plan focusing more specifically amongst other things, on crime in public transport, non-motorised mobility and motorcycles.. The EESC also recommends targeting the EU's structural and cohesion funds more effectively and in particular, by establishing a specific financial instrument to promote urban mobility. It proposes making the allocation of funds conditional on the implementation of urban mobility plans and compliance with criteria on accessibility for people with reduced mobility. The EESC *'wishes to reiterate its proposal to make any financial aid to local authorities from EU funds dependent on mobility plans being drawn up, it being understood that cities should remain free to adapt these plans to specific local conditions and that these plans should,*

³ TEN/414 - CESE 767/2010 FR/DS/GW/ms. <https://toad.eesc.europa.eu>

⁴ http://ec.europa.eu/transport/themes/urban/urban_mobility/action_plan_en.htm

however, include a binding target of shifting towards environmentally friendly means of transport in line with EU minimum requirements, in order to reach specified targets. The special 'urban mobility' label recommended by the EC, which the EESC urges should be implemented without delay, should only be granted if the above criteria are met'.

The Committee of Regions (COR) had an opinion on an action plan on urban mobility in April 2009 (before the current APUM had been launched). The COR *'regrets the failure of the EC to issue the expected APUM as this potentially limits the potential of urban mobility policy'⁵*. The opinion of the EP at that time ⁶ contained elements which are still relevant for current and future EU actions, namely:

- *A model whereby Urban Mobility plans are implemented via sustainable long-term public-public/public-private agreements or Mobility Agreements*
- *A financing instrument that would encourage urban and metropolitan areas to set up mobility plans, made available to regions and urban areas directly (without depending upon Member State approval)*
- *Funding incentives, award schemes and exchange of best practices, a.o. an EU-wide 'Blue Flag Scheme' to be awarded on the basis of specific indicators to urban areas with low levels of pollution and congestion*
- *Promotion of integrated urban mobility plans but, mindful of potential subsidiarity issues, the decision to produce such plans lies with the cities and regions concerned*
- *European funding and co-financing of urban transport projects conditional upon the existence of integrated mobility plans, further adding to the EU incentivisation of these plans*
- *Guidelines on urban charging and on road tolls for accessing large towns and city centres*
- *Financing not projects but outcomes that meet the EU's environmental and socio-economic objectives*
- *Further study on the provision of on inter-modal information in EU conurbations*

The Council of the European Union welcomed the APUM. The Council *'stresses the challenge and the opportunity that this initiative presents – in line with the principle of subsidiarity – to improve the sustainability and safety of mobility in urban and metropolitan areas while keeping it affordable to the general public. The Council calls for measures to promote dialogue between all relevant parties and renew support for the cities and authorities responsible for urban mobility'⁷*. Moreover the Council invited the EC to cover urban mobility in the next White Paper.

⁵ Opinion of the Committee of the Regions on an Action Plan on Urban Mobility (CdR 417/2008 fin)

⁶ Opinion of the Committee of the Regions on an Action Plan on Urban Mobility (CdR 417/2008 fin).<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:200:0001:0004:EN:PDF>

⁷ Council conclusions on Action Plan on Urban Mobility, 3024th TRANSPORT, TELECOMMUNICATIONS AND ENERGY Council meeting, Luxembourg, 24 June 2010; link via www.ebookbrowse.com/2010-06-24-apum-council-conclusions-pdf-d78418230

2.2 Stakeholders

The general opinion expressed in stakeholders reactions on the announcement and release of APUM was a positive one.

Several stakeholders⁸ stated to support APUM while they were expecting that the EC could support local authorities in order to realise sustainable urban mobility, through development of tools which can facilitate and support the implementation of most efficient measures and policies at local level, tools for the dissemination of best practices, harmonisation, key indicators for comparative analysis of mobility policies, performance indicators for mobility systems, minimum quality targets and through financial incentives).

Several stakeholders⁹ were showing their positive expectations on the implementation of the APUM, such as *'The expectation that the forthcoming APUM will be able to set out the means by which these requirements could be delivered, including the potential for European funding of these projects'*.

Several stakeholders did welcome the release of the APUM, however, stated the lack of ambition (a.o. Energy cities¹⁰, UNIFE, Alstom¹¹) and some stakeholders responded with an opinion about the necessary condition for the implementation of the APUM, such as *'It is essential, that the co-ordination between the different EU-policies is reinforced so that contradicting actions/initiatives with a negative effect on urban transport are avoided. The recommended actions cover the appointment of 'urban transport' liaison officers in other DGs (for example DG ENVI, DG REGIO, DG EMPL, DG ENTR, DG RESEARCH, DG INFOSOC, ...)'*.

⁸ A.o. POLIS, Eurocities, VNG, CEMR, IRU, EPOMM, UITP

⁹ A.o. COSLA, ECF, UITP, RICS

¹⁰ http://www.energy-cities.eu/IMG/pdf/opinion_energy-cites_action_plan_on_urban_mobility_10.2009_en-2.pdf

¹¹ Uploaded document

3 Theme 1 Promoting integrated policies

The first theme consists of three actions:

1. Accelerating the take-up of sustainable urban mobility plans
2. Sustainable urban mobility and regional policy
3. Transport for healthy urban environments

This theme responds to the main message 'promoting integrated policies', which emerged from the Green Paper consultation. The box below gives the description of the theme¹².

'An integrated approach can best deal with the complexity of urban transport systems, the governance issues and the links between cities and their surrounding areas or regions, the interdependence between transport modes, the limitations within urban space and the role of urban systems in the wider European transport system. An integrated approach is not only needed for the development of transport infrastructure and services, but also for policy making to link transport with environment protection¹³, healthy environments, land use planning, housing, social aspects of accessibility and mobility as well as industrial policy. Developing strategic, integrated transport planning, establishing appropriate mobility planning organisations and setting realistic targets are essential to address the long-term challenges of urban mobility, while supporting also cooperation with and between transport operators`.

¹² COM(2009) 490 final, Action Plan on Urban Mobility

¹³ For example, ensuring coherence between sustainable urban mobility plans and air quality plans which are prepared in the framework of the EU air quality legislation.

3.1 Action 1 Accelerating the take-up of sustainable urban mobility plans

The box below describes the action¹⁴.

- A) *In the short-term the EC will support local authorities in developing sustainable urban mobility plans covering freight and passenger transport in urban and peri-urban areas.*
- B) *It will provide guidance material, promote best practice exchange, identify benchmarks, and support educational activities for urban mobility professionals.*
- C) *In the longer term, the EC could take further steps, for example, through incentives and recommendations.*
- D) *Whenever possible, the EC will encourage Member States to provide platforms for mutual learning and sharing of experiences and best practices that would foster the development of sustainable urban mobility policies.*
- E) *The EC will also introduce an urban mobility dimension in the Covenant of Mayors¹⁵ in order to promote an integrated approach linking energy and climate change with transport.*
- F) *It will encourage the incorporation of transport and mobility issues in the Sustainable Energy Action Plans to be prepared by the cities participating in the Covenant.*

We present the review as follows:

- Support of local authorities in developing SUMP's and the provision of guidance material (A and B in the action box)
- The provision of platforms for mutual learning and sharing of experiences (D in the action box)
- The urban mobility dimension in the Covenant of Mayors and the incorporation of transport and mobility in the Sustainable Energy Action Plans (E and F in the action box)

Element C is a long term strategy and has not been included in the review.

3.1.1 Support of local authorities and the provision of guidance material

This section describes the review of:

- *In the short-term the EC will support local authorities in developing sustainable urban mobility plans covering freight and passenger transport in urban and peri-urban areas;*
- *It will provide guidance material, promote best practice exchange, identify benchmarks, and support educational activities for urban mobility professionals.*

¹⁴ COM(2009) 490 final, Action Plan on Urban Mobility

¹⁵ www.eumayors.eu.

We conclude that this action has been implemented via the CIVITAS initiative, the ELTIS PLUS project and the IEE Programme.

CIVITAS initiative

Since 2002 the EC has been raising awareness - in particular, through its CIVITAS initiative- in Europe's towns and cities for the need to develop Sustainable Urban Mobility Plans. CIVITAS has helped towns and cities build the capacity to develop and implement such plans. The initiative has also allowed these towns and cities to test new elements of their Sustainable Urban Mobility Plans in pilot projects, prior to their large-scale implementation, thereby, turning innovative new concepts into proven and mature solutions. Within the scope of the APUM, the new CIVITAS projects started at the end of 2012.

We conclude that:

- CIVITAS is broadly supported by the relevant stakeholders and that a continuation of the initiative is expected
- The EC published a Civitas call as promised
- Actual funding provided to CIVITAS has decreased
- The last CIVITAS-call, capitalising CIVITAS knowledge, should and could in our opinion lead to greater support for the implementation of an integrated Urban Mobility Package.

ELTIS PLUS

The EC has initiated ELTIS PLUS to accelerate the large-scale uptake of Sustainable Urban Mobility Plans by competent authorities in Europe. The main deliverables of the ELTIS PLUS project are SUMP guidelines, State-of-the-Art reports on SUMP in Europe and the mobility plans website www.mobilityplans.eu.

The EC offers support to Europe's towns and cities for the development of Sustainable Urban Mobility Plans through the ELTIS PLUS project that was launched in May 2010¹⁶. The project organised a number of workshops and carried out a user-needs assessment, as well as presented a comprehensive state-of-play and guidelines report in May 2011. The report describes the process of preparing a Sustainable Urban Mobility Plan and the activities this involves and provides examples of best practices. The report will be accompanied by a video on 'Sustainable Urban Mobility Plans' that is currently under development and a series of training and promotion events have taken place in all EU Member States.¹⁷ The project 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.

¹⁶ Since the kick-off meeting three 'knowledge consolidation workshops' on Sustainable Urban Mobility Plans have been held in Brussels (June 2010), Cologne (September 2010) and Szentendre (October 2010). A user needs assessment has been carried out to determine levels of experience and likely training needs.

¹⁷ For the training event, focus will be on Member States where Sustainable Urban Mobility Plans are not well-known or applied. The training events will be organised in cooperation with national stakeholder organisations (associations of cities, public transport operators, planners, architects).

The project consolidated existing knowledge concerning the different approaches in the 31 countries and also identified training and awareness raising needs within these countries. The results are presented in the 'State-of-the-Art Report on Sustainable Urban Mobility Planning in Europe' and informed of new guidelines on developing and implementing Sustainable Urban Mobility Plans. Throughout 2011 and 2012, ELTIS Plus organised and carried out awareness raising and training workshops on sustainable urban mobility planning in the respective national languages all across Europe:

- Two train-the-trainer events (one each on awareness raising and technical training) in which more than 25 trainers have been trained (enabling them to moderate a training in their national language);
- Between October 2011 and March 2012, twelve SUMP awareness raising events in national languages¹⁸.
- Between April and September 2012, six technical training seminars in respective national languages¹⁹
- Since October 2010, SUMP presentations (mainly on the concept and the SUMP Guidelines) at 40 conferences and workshops throughout Europe

The mobility plans website <http://www.mobilityplans.eu/> was launched in March 2011 to provide information on Sustainable Urban Mobility Plans and related training and promotional activities. Since May 2011, the draft guidelines 'Developing and Implementing a Sustainable Urban Mobility Plan' have been available through this website. The rise in the amount of visits to the mobility plans website²⁰ is an indicator for a growing interest and awareness in SUMP. In January 2012, additional features (sub-sites, documents) were added and the website and 'SUMP Guidelines' have been widely promoted during the SUMP awareness raising and training events that began to take place in January 2012. Since the website launch (March 2011) 209.331 visits have been recorded until December 2012, with an average of 14.110 visits per month in 2012. The peak of visits to the mobility plans website was 21,102 hits in September 2012. During this month the European Mobility Week took place, for which SUMP was selected as the guiding theme and the EC launched the first SUMP award for local authorities.

Most respondents consider the website and seminars as useful. Several respondents²¹ confirm that the two websites www.mobilityplans.eu and www.eltis.org, the guidance and the best practice exchange, are useful tools for cities wishing to develop SUMP (and have little experience in developing such strategies). *The Vienna City Administration* (Urban Development and Planning)

¹⁸ Target groups were 'national multipliers'. This included representatives of national Ministries, professional associations, national networks of cities in Bulgaria, Croatia, Czech Republic/Slovakia (joint event), Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Poland, Romania, and Slovenia: 704 participants (minimum 31; maximum 92; average: 59).

¹⁹ (target groups, local planners and implementers) in Bulgaria, Czech Republic/Slovenia (joint seminar), Finland, Ireland, Italy, and Slovenia: 470 participants (min 26, max 220, average 78; average without 220; outlier: 50)

²⁰ From March 2011 until September 2012 156,793 visits have been paid to the website. The largest amount of hits in 2011 was 5,662 (October 2011), in 2012 hits exceeded 9,000 in each month. In 2012 (Jan - Sept), there were 116,778 hits (average 12,975).

²¹ Amongst others the Vienna City Administration, the professional association of ACLEA and the UITP

states that *'the term of SUMP has been established in the professional discourse of planners throughout Europe'* and that - concerning seminars and activities *'work is ongoing regarding identification of benchmarks and educational activities although results are not so strong so far in this area'*. The Helsinki Region Transport (authority) states that *'SUMP seminars are being held and the information is being distributed quite well'*.

Via the ELTIS PLUS project a working definition of a SUMP has been provided. However, there is no official EU document with a definition of a SUMP yet: The 2012 report of CIVITAS Vanguard²² states e.g.: *'The guidelines aimed at developing and implementing a SUMP provide a good understanding of what a SUMP should be, however, no official document to date offers an exhaustive definition of what a SUMP should be. Therefore, to date it is difficult to assess what a SUMP is'*.

We conclude that the ELTIS PLUS project actively contributed to the support of local authorities in developing SUMP's and in providing guidance material, best practice exchanges, benchmarks and educational activities for urban mobility professionals.

Intelligent Energy Europe programme

The Intelligent Energy – Europe (IEE) programme supports the use of clean and sustainable solutions. Transport is a focus area where energy efficiency should be improved (called STEER). Targeted funding is provided for creative projects putting this idea into practice. We conclude that IEE addressed actions that aim at reducing transport energy use by supporting the take-up of Sustainable Urban Mobility Plans' with one of the call priorities in 2011 and 2012 and used guidance materials developed as part of the ELTIS PLUS project to further build on this. One project that has received funding (after the 2011 call) is the Poly-SUMP project, where sustainable urban mobility plans for polycentric regions are promoted. The Poly-SUMP project started in May 2012. ENDURANCE, Advance, Quest and Challenge are other funded projects, with a focus on SUMP's.

3.1.2 Platforms

This section describes the review of:

- *Whenever possible, the EC will encourage Member States to provide platforms for mutual learning and sharing of experiences and best practices that would foster the development of sustainable urban mobility policies.*

The encouragement of Member States to provide platforms that would foster the development of sustainable urban mobility policies has not been (fully) reached:

- *'With the establishment of www.mobilityplans.eu, the development of guidelines, the awareness raising and training activities of Eltis (SUMP activity), and the support for several initiatives on SUMP's through the Intelligent Energy-Europe programme (QUEST, etc.) the EC answers to the objectives set out in the action, as well as to a concrete needs of urban*

²² Report 'the first 10 years of CIVITAS: share your experience and improve the Initiative' (Vanguard, 2012)

transport professionals within cities. So far, the impact towards decision makers at Member State level is low (POLIS)'

- ETRA '*believes in a need for change of behaviour and mentalities of local authorities. Therefore, they believe that the training of local authorities is essential*'.
- The majority of the survey respondents have a direct relation with the EC (for example via projects) or European Associations and/or are European Associations themselves. If local or regional organisations do not have a direct relation with the EC and/or a European Association then they are not made aware of EU actions via a national government / association.

We conclude that that the EC has done useful actions but that it has been difficult to obtain widespread take-up because necessary "multiplication and dissemination" at member state-level did not take place.

3.1.3 Introduction of an urban mobility dimension in the Covenant of Mayors and linking Sustainable Energy action plans

This section describes the review of:

- *The EC will also introduce an urban mobility dimension in the Covenant of Mayors²³ in order to promote an integrated approach linking energy and climate change with transport.*
- *It will encourage the incorporation of transport and mobility issues in the Sustainable Energy Action Plans to be prepared by the cities participating in the Covenant.*

Covenant of Mayors

Sustainable urban mobility is one of the topics that has been raised in the Covenant of Mayors, which brings over 2 000 local authorities in Europe and worldwide together that have committed themselves to reduce CO₂-emissions and improve energy efficiency. Transport and mobility issues have been incorporated in the 'How to develop a Sustainable Energy Action Plan (SEAP)-Guidebook'²⁴. Such plans need to be prepared by all cities participating in the Covenant of Mayors. '*The number of signatories to the Covenant of Mayors on sustainable energy has reached 1000 in December 2009. This milestone marks ten months of exceptional growth for the Covenant of Mayors' Initiative as the number of local authorities participating has almost trebled since the first signing ceremony in February 2009²⁵. In February 2012 over 1000 cities have developed sustainable Energy Action Plans (SEAPs) and begun implementing them, reducing CO₂ emissions and creating more liveable and economically prosperous cities²⁶.*

In November 2012, 1,966 SEAPs were found on the website of the Covenant of Mayors and 4,446 city representatives had signed the covenant.

²³ www.eumayors.eu.

²⁴ EU Publications Office 2010.

²⁵ http://www.eumayors.eu/IMG/pdf/1000th_signatory_to_the_Covenant_of_Mayors_-_en.pdf

²⁶

http://www.eumayors.eu/IMG/pdf/More_than_1000_local_action_plans_being_implemented_by_towns_and_cities.pdf

However, we conclude that the link between energy and climate change with transport, as well as the incorporation of transport and mobility issues in the Sustainable Energy Action Plans (SEAPs) is only found in some cases²⁷. Some respondents support the Covenant of Mayors, such as SAPE and the city Administration of Prague. *'Thanks to the Covenant of Mayor Initiative, 30 Polish municipalities became members and 7 of them (including capital Warsaw) are in possession of SEAPS, which cover the transportation issues²⁸. An awareness of the need to address this issue was raised²⁹, due to the mobility plans being prepared by cities participating in Covenant of Mayors (Prague included),*

In 2012, the EESC launched a 'Covenant of Companies' associated to the Covenant of Mayors which enhances cooperation with the private sector. An engine for recovery, growth and jobs³⁰ will be associated with the Covenant of Mayors and will present an extra drive to implement plans.

TIDE FP7 Coordination and Support Action

In October 2012, the TIDE Coordination and Support Action (Transport

Innovation Deployment for Europe) on the take-up of transport innovation in

urban and regional transport started. The mission of the TIDE project is to enhance the broad transfer and take-up of 15 innovative urban transport and mobility concepts throughout Europe and to make a visible contribution in establishing them as mainstream measures. Sustainable Urban Mobility Plans will be a horizontal topic to integrate the cluster activities.

3.1.4 Main findings

The box below presents the main findings of the action accelerating the take-up of sustainable urban mobility plans.

²⁷ Examples are Milan (congestion charge for clean cities), Agueda (free electric biking), Nantes (mobility for all).

²⁸ Response on the stakeholder consultation from the country-wide association Energy and Environment Conservation SAPE-Poland

²⁹ Response on the stakeholder consultation from the city administration of Prague

³⁰

http://www.eumayors.eu/IMG/pdf/Local_authorities_as_laboratories_for_green_growth.pdf

- The EC provided guidance material, promoted best practice exchange and supported educational activities for urban mobility professionals. Through these activities the action has been implemented and local authorities are supported in developing sustainable urban mobility plans.
- However, freight transport in sustainable urban mobility has not yet been fully addressed.
- The encouragement of Member States to provide platforms that would foster the development of sustainable urban mobility policies has not been (fully) reached. The EC has done useful actions but it has been difficult to obtain wide-spread take-up because necessary “multiplication and dissemination” at member state level did not take place.
- An urban mobility dimension in the Covenant of Mayors has been introduced.
- The incorporation of transport and mobility issues in the Sustainable Energy Action Plans is only found in some cases.
- Some stakeholders support the linking of regional development and cohesion funds to cities and regions that have submitted a current and independently validated Urban Mobility Performance and Sustainability Audit Certificate. This might accelerate the take-up of sustainable urban mobility plans.
- Via the ELTIS PLUS project a working definition of a SUMP has been provided. As of yet however, there is no official EU document with a definition of a SUMP.

3.2 Action 2 Sustainable urban mobility and regional policy

The box below describes the action³¹.

To increase awareness of the funding available from the Structural and Cohesion Funds and the European Investment Bank, the EC:

A) envisages issuing information on the link between sustainable urban mobility measures and regional policy objectives under the current Community and national framework conditions.

B) It will address the wider framework for sustainable urban development as well as the link between urban transport and the trans-European transport network.

C) The EC will also list funding opportunities and explain the application of State aid and public procurement rules.

We present the review following the above mentioned elements A, B and C.

³¹ COM(2009) 490 final, Action Plan on Urban Mobility

3.2.1 The link between sustainable urban mobility measures and regional policy objectives under the current framework

This section describes the review of:

- *the EC envisages issuing information on the link between sustainable urban mobility measures and regional policy objectives under the current Community and national framework conditions.*

The EC has produced a guide that explain the regulatory and financial frameworks that are relevant to urban areas, "guide to the urban dimension in European Union policies"³². This guide has two parts:

- Part 1 - The urban dimension and the instruments of Cohesion Policy
- Part 2 - The urban dimension in other policies of the European Union

The guide puts each policy in context, and specifies relevant financial resources, exchange mechanisms and information sources available. It is an up-to-date information tool on EU urban policies. It is targeted at those working on urban issues in local and regional authorities, elected representatives, and all other stakeholders with an interest in urban development. It identifies initiatives which, under various EU policies, have both direct and indirect implications for the sustainable development of urban areas.

At the end of 2010, the EC launched a 15-month study (*Study on the synergies between EU policy on urban mobility and its regional policy, including its instruments*³³) to explore the synergies in more depth, between EU policy on sustainable urban mobility and its regional policy, including its instruments. The study was finalised in 2012 and highlighted how structural and cohesion funds and the EIB can contribute to reaching the objectives of the EU cohesion policy, while fostering the urban dimension envisaged in the Europe 2020 Strategy for a modernised and sustainable European transport system³⁴. The study has an important link to action 15 (addressing future funding opportunities).

Several respondents suggested proposals for take-up concerning funding opportunities and the link between sustainable urban mobility measures and regional policy objectives. For example POLIS:

- *'Further communicate and clarify ambitions for the 2014-2020 multi annual financial framework with regards urban transport spending';*
- *'Provide information towards decentralised authorities in a comprehensive manner on which financing options are available';*
- *'Link information exchange programmes such as CIVITAS or its successor with financing programmes'*

³²

http://www.eukn.org/E_library/Urban_Policy/What_can_the_EU_do_for_your_city_%E2%80%93_Guide_on_the_urban_dimension_in_EU_policies

³³ Booz&Co: Study on the financing needs in the area of sustainable urban mobility, MOVE/B4/457-1 2010 SI2.585084, March 2012

³⁴ According to the ToR the same study will undertake an assessment of future funding needs in the field of urban mobility and the potential impact of additional EU funding (see Action 15).

Comprehensive information on the link between sustainable urban mobility measures and regional policy objectives has not been found. The website mobility plans³⁵ gives information about possible benefits, which might be seen as a link between sustainable urban mobility measures and possible regional policy objectives of the Member States. This information is not found on the ELTIS website, which we consider as the Mobility Portal. The ELTIS website offers, however, a dedicated service to EU Funding and to EU legislation and policy, including State Aid.

Our conclusion is in line with POLIS, *“no comprehensive and well publicised information on ‘the link between sustainable urban mobility measures and regional policy objectives have been published so far to their knowledge’.*

3.2.2 Address the wider framework for sustainable urban development

This section describes the review of:

- *It will address the wider framework for sustainable urban development as well as the link between urban transport and the trans-European transport network.*

Current regional funding programmes will run until 2013. Options for cohesion policy³⁶ after 2014 are already being discussed. These discussions are linked to the broader context of the EU budget and the Europe 2020 strategy. Legislative proposals for cohesion policy during the period 2014-2020 were adopted by the EC on the 6th of October 2011. Following the Cohesion Policy proposals of October 6th and to help Member States prepare for the next programming period, the EC presented the **‘Common Strategic Framework’** (CSF) on the 14th of March 2012. The CSF should increase coherence between policy commitments made in the context of Europe 2020 and investments on the ground. It should encourage integration by specifying how the funds can work together and will provide a source of strategic direction to be translated by Member States and regions into the programming of the CSF Funds in the context of their specific needs, opportunities and challenges. In this regard, it is intended to help in the setting of strategic direction for the next financial planning period from 2014 to 2020 in Member States and their regions. It will enable a far better combination of various funds³⁷ to maximise the impact of EU investments. National and regional authorities will use this framework as the basis for drafting their ‘Partnership Contracts’ with the EC, committing themselves to meeting Europe’s growth and job targets for 2020.

³⁵ <http://www.mobilityplans.eu/index.php?ID1=6&id=6>

³⁶ SWD(2012) 61 final, Part I, EC STAFF WORKING DOCUMENT Elements for a Common Strategic Framework 2014 to 2020

³⁷ The European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund (CF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF) pursue complementary policy objectives and their management is shared between the Member States and the EC. They are the main source of investment at EU level to help Member States to restore and increase growth and ensure a job rich recovery while ensuring sustainable development, in line with Europe 2020 objectives.

Both the IRU and FEBTRA stated *'link the urban dimension with the wider EU transport and travel area, within the concept of a common EU transport and travel area as urban mobility is part of the overall mobility, transport and travel chain. Actions in the field of urban mobility should be compatible with policy implementation at regional, national and EU level. This is not always the case in areas such as infrastructure policy, mobility planning, access restrictions, charging schemes and use of alternative fuel'*.

ETRA highlighted that *'The EC should link regional development and cohesion funds to cities and regions that have submitted a current, independently validated Urban Mobility Performance and Sustainability Audit certificate'*. This is in line with the statement of the European Parliament (see chapter 2) that *'European financing in the field of urban transport should be made conditional on the existence of integrated urban mobility (urban travel) plans'*, as well as in line with initiative 31 of the White Paper, which states *"link regional development and cohesion funds to cities and regions that have submitted a current, and independently validated Urban Mobility Performance and Sustainability Audit Certificate'*.

The methodology for planning the future Trans-European transport network (TEN-T) features a dual layer network structure, comprising a comprehensive and core network³⁸. The comprehensive network represents the basic layer of the TEN-T and includes components for all transport modes – rail, road, inland waterway, air and maritime, as well as their connecting points and corresponding traffic information and management systems. The core network is a subset of the comprehensive network overlaying it and represents the most strategically important nodes and links of the Trans-European transport network. Urban nodes are essential elements in the TEN-T networks and they are specifically addressed in the TEN-T guidelines (article 36). The network is multi-modal, i.e. it includes all transport modes and their connections, as well as relevant traffic management systems and the infrastructure included in this network will be a subset of the comprehensive network.

We conclude that the wider framework for sustainable urban development as well as the link between urban transport and the Trans-European transport network has been addressed. An important issue is the link between funding and SUMP's. The website of ELTIS also mention this link, *'SUMP's can help planners access certain funding pools, which are available for innovative solutions or integrated planning approaches. In some cases, the existence (or the work towards the adoption) of a Sustainable Urban Mobility Plan can improve the competitiveness of a city when applying for funding'*.

3.2.3 List funding opportunities

This section describes the review of:

- *The EC will also list funding opportunities and explain the application of State aid and public procurement rules.*

³⁸ The planning methodology for the Trans-European transport network (TEN-T), as used for the EC proposal made on 19 October 2011.

Funding opportunities

A handbook on funding opportunities are available at DG REGIO, in addition to the *ELENA* study and the *Common Strategic Framework*. The following table illustrates the number of projects supported by the European Regional Development Fund (ERDF) and Cohesion Fund.

<i>Category</i>	<i>No. of major projects³⁹ supported by ERDF/Cohesion fund</i>	<i>Total cost in Euro</i>	<i>EU support amount in Euro</i>	<i>Main countries</i>
Urban transport	14 (incl. 2 CF and 12 ERDF)	2,5 billion	1,2 billion	Bulgaria (3), Poland (3), Italy (2)
Promotion of clean urban transport	16 (incl. 10 CF and 6 ERDF)	3,6 billion	1,6 billion	Hungary (5), Poland (4), France (3), Spain (2)

Source: DG Regio

The Structural Funds (the ERDF and the ESF) and the Cohesion Fund are the major financial instruments in place to support the Cohesion Policy. In addition to the grants provided by these funds, resources are also available from the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). Existing EU instruments that provides funding support are:

- The Cohesion Fund supports TEN-T capital projects;
- The CIVITAS programme provides funding and technical support for demonstration, evaluation and implementation of innovative technology led projects;
- The JASPERS programme assists cities in managing delivery of already funded urban mobility projects;
- The JESSICA programme enables cities to access private finance for urban regeneration projects

The ERDF is set to finance over 300 Operational Programmes of Cohesion Policy in the 2007-2013 period. Of these, approximately 3% are clearly earmarked for urban projects (equivalent to 10 billion EUR). The cities and towns of regions that fall under the Convergence objective are set to receive, in absolute terms, almost three times more investment than those that fall under the Regional Competitiveness and Employment objective.³³ In the previous funding period, 2000-2006, the funding for transport programmes was approximately 35 billion EUR, of which just over two billion was allocated to urban transport.³⁴ It has been difficult locating detailed figures for spend on urban transport in 2007-2013, however, in concert with the Cohesion Fund, the ERDF looks to contribute approximately 8 billion EUR for urban transport during this period, reflecting the priorities of Member States.³⁵

³⁹ Projects of total cost more than €50 million.

Whereas in the previous period (2000-2006), when transport and environment infrastructure are the only areas of the funding, Cohesion Fund in 2007-2013 covered not only major transport and environmental protection infrastructures, but also found projects in the fields of energy efficiency, renewable energy and intermodal, urban or collective transport. Based on the European EC proposal (EU 2007), the Cohesion Fund in 2007-13 no longer functioned independently but participated in the Convergence objective (EU 2007). The Cohesion Fund was more integrated into the operation of the mainstream Structural Funds. The EC proposed a switch from project-based support to programme-based support. The EC approval will be required only in the case of major projects (EUR 25 million for environmental and EUR 50 million for transport projects). In the period of 2007-2013, EUR 70 billion was available for Cohesion Fund which represents 20% of the total amount set aside for Cohesion Policy.

Between 2006 – 2010, JASPERS supported 49 assignments in the railways, airports and ports; 43 assignments in the roads projects (focused on TEN-T); 40 assignments in the urban infrastructure projects such as supporting preparation of metro, tram, trolleybus and bus related investments in infrastructure and rolling stock in capital and secondary cities.

The Joint European Support for Sustainable Investment in City Areas, better known as JESSICA, is a unique financial initiative which allows Member States to access a portion of their allocated EU Structural Fund to make repayable investments (in the form of loans/equity) in urban development projects which form part of a larger integrated plan for sustainable urban development. The money from the EU Structural Fund is drawn into an 'Urban Development Fund' which can also contain other private/public sector investments and is controlled through a managing authority, either at national or regional level.

The Urban Development Fund (UDF) can be classified as what is known more commonly as a 'Revolving Loan Fund'. It is a source of finance from which repayable investments are made to urban development projects, and as repayments are made back to the fund, more loans can in turn be made to new urban development projects. Up until November 2010, 54 JESSICA evaluation studies were undertaken in 19 Member States. A total of EUR 1.65 billion has been committed to 19 JESSICA projects across 11 Member States⁴⁰. Of the 19 JESSICA projects, 5 have been created at national level for national development plans, and 14 at regional level responding to regional development plans. 16 of the JESSICA projects had holding funds, and 15 were managed by EIB⁴¹.

Managed by the EIB and funded by the EC, ELENA (European Local Energy Assistance) assists local authorities in accelerating the development of their energy efficiency and renewable energy investment programmes. ELENA is funded through the Intelligent Energy Europe programme. Eligible projects focus mainly on energy efficiency and renewables in buildings, urban transport and related local infrastructure. This initiative supports, in particular, the Covenant of Mayors initiative of the EC, whereby cities voluntarily commit to pursuing the EU's energy and climate objectives: in this way action 2 complements action 1. The initiative has been created to assist in the transition from preparing action plans for making investments, usually higher than € 50 M, to support for programmes that can be replicated in other regions or cities and to extend the

use of innovative techniques and approaches. The current budget of the ELENA facility is €15 M annually.

State aid and public procurement rules

The study on synergies between EU policy on urban mobility and its regional policy described the implications of state aid and procurement rules on how funds can be invested into transport projects.

We conclude that funding opportunities are listed and the application of State aid and procurement rules has been explained. Information might be found on the ELTIS website.

We also conclude that the consultation of stakeholders showed a relatively low awareness of the action. A possible explanation could be that respondents refer to the state of play document, where the study on synergies is mentioned. At the time of the survey this study was not yet published.

3.2.4 Main findings

The box below presents the main findings of the action on sustainable urban mobility and regional policy.

- Comprehensive information on the link between sustainable urban mobility measures and regional policy objectives has not been found. The website mobility plans gives information about possible benefits, which might be seen as a link between sustainable urban mobility measures and possible regional policy objectives of the Member States. This information is not found on the ELTIS website, which we consider as the Mobility Portal. The ELTIS website offers, however, a dedicated service to EU Funding and to EU legislation and policy, including State Aid.
- The wider framework for sustainable urban development as well as the link between urban transport and the Trans-European transport network has been addressed.
- An important element in addressing the wider framework for sustainable urban development is the link between funding and SUMP's
- Funding opportunities have been listed in a handbook by DG REGIO as well as on the ELTIS website
- The ELTIS website also offers a dedicated service to State Aid.

3.3 Action 3 Transport for healthy urban environments

The box below describes the action⁴⁰.

Sustainable urban transport can play a role in creating healthy environments and contribute to reducing non-communicable diseases such as respiratory diseases, cardiovascular diseases and injury prevention.

- A) The EC supports the development of partnerships towards healthy environments*
- B) and will explore, in the context of its work on public health, notably in the implementation of the strategies on nutrition, overweight and obesity, environment and health, injury prevention and cancer, further synergies between public health and transport policy.*

Various initiatives have been launched by the EC to realise both of the above mentioned elements. Below we will present the review for both elements (A and B).

3.3.1 Review

European Mobility week

In urban areas, the links between transport and health are particularly pronounced. Depending on the modes chosen, urban mobility can contribute to stressful congestion, noise levels and the emissions of harmful pollutants or, alternatively, it can provide an active and healthy lifestyle. In 2010, the EC helped raise awareness for this issue in towns and cities across Europe by making the connection between urban mobility and health the 2010 theme of European Mobility Week: 'Travel smarter, live better!'

We conclude that the support of the development of partnerships towards healthy environments has been implemented by the European Mobility week. Via the 2011 theme of the European Mobility Week ('Alternative Mobility') local partnerships were formed in 2,268 European municipalities to address these topics. The outreach of this Action is relatively large and the main reason might be that – in contrast to Actions 1 and 2 – there are clear national dissemination channels which disseminate 'the product mobility week' to citizens. Due to a different dissemination approach, more people are reached. However, the impact or sustainable behavioural change, due to the Mobility Week is not clear.

IEE STEER

The STEER Programme (as transport pillar of the Intelligent Energy Europe programme) has provided € 14 million to twelve European pilot projects related to cycling⁴¹. An additional €2,4 million was funded to two projects with a substantial focus on walking⁴². A range of mobility management projects (like

⁴⁰ COM(2009) 490 final, Action Plan on Urban Mobility

⁴¹ <http://www.managenergy.net/resources/640>

⁴² Active Access and Astute

Aeneas) also dealt with and promoted walking and cycling. These projects are not included in the funding amounts mentioned above.

The AGE platform considers 'the Aeneas project as a good example within this Action. Promoting safe cycling is a key issue for older people to prevent injuries, to increase their mobility opportunities and to improve their health through physical activity while developing green transport opportunities. According to the AENEAS project results, cycling plays a positive role in offering better health, flexibility and independence, and in preventing isolation. This is therefore, in line with the objective to prevent respiratory and cardiovascular diseases'. This is also in line with the statement of EPOMM which 'recognises the importance of sustainable transport for a healthy and more liveable urban environment (Action 3) and particularly invites the EC to promote soft modes: cycling and walking through its work on public health, as walking and cycling are in fact a major instrument for meeting environmental objectives in terms of CO₂ reduction and greater energy efficiency'.

We conclude that the support of the development of partnerships towards healthy environments has been implemented by several European pilot projects on walking, cycling and mobility management.

Strategies for Europe on nutrition, overweight and obesity-related health issues

Synergies between public health and transport policy are being explored within the Strategy for Europe on Nutrition, Overweight and Obesity-related health issues (adopted in May 2007), contributing to the reduction of risks associated with limited physical activity in the European Union. Tools for developing partnerships have been created, such as the High Level Group for Nutrition and Physical Activity and the Platform for action on Diet, Physical Activity and Health – see Platform Database for platform commitments.

Evidence for the exploration of further synergies between public health and transport policy, notably in the implementation of the strategies for Europe on nutrition, overweight and obesity-related health issues, has only been found in the recent FP7-HEALTH-2013-INNOVATION Call. This Call addresses issues of integrating health concerns in transportation and urban planning.

Link between EU road safety action and health strategy

In its current Health Strategy 'Together for Health – 2008-2013', the EC supports actions to promote health and prevent diseases throughout lifespan, including environmental risks, (traffic) accidents (linking to the new EU Road Safety Action Programme), and physical activity.

Adoption of communication on Sport

The EC adopted a Communication regarding Sport on the 18th of January 2011 and continues to promote health-enhancing physical activity (HEPA) in line with the EU Physical Activity Guidelines (2008). In addition, the EC supported nine transnational projects to promote HEPA. These projects were financed from the Preparatory Action in the field of sport aiming to test suitable networks for the new funding scheme for sport as proposed under the new Multi-annual Financial Framework 2014-2020.

Study on urban mobility data and statistics

The connection between urban transport and health will be explored further in a study on urban mobility data and statistics (Action 16).

Further synergy between public health and transport policy

Several stakeholders state that cycling is an important link between transport and health. *EPHA: 'Physical activity is one of the four main determinants of health through its actions i.e. benefits on the physical and mental health of individuals. However, people might be reluctant to cycle for safety reasons. Therefore, it is essential to 'increase the safety of cycling by encouraging the establishment of adequate infrastructures' as stated in the EC Communication towards a European Road Safety Area: policy orientations on road safety 2011-2020. Urban organisation and physical activity are linked. Thus, local policymakers have a role to play in improving their population's health through the offer of better opportunities to be physically active. This is an excellent example of the thorough implementation of the health in all policies approach towards comprehensive and coherent policymaking. Moreover, habits integrated at a young age last lifelong'.*

We conclude that it is not apparent that an in-depth exploration of further synergies between public health and transport policy has taken place. This is also stated by POLIS *'No significant action has been taken in this area and none of the EU services contacted has acknowledged ownership of this action, for which there do not seem to be a clear assignment of responsibility. This is considered as a shame for an important, yet largely unexplored policy area' (POLIS).* However, the publication of the recent FP7-HEALTH-2013-INNOVATION Call which addresses issues of integrating health concerns in transportation and urban planning has been embraced as a first step in the further synergies between public health and transport policy.

3.3.2 Main findings

The box below presents the main findings of the Action on transport for healthy urban environments.

- The support to develop partnerships towards healthy urban environments has been implemented via the European Mobility week and STEER projects.
- It is not apparent that an in-depth exploration of further synergies between public health and transport policy has taken place.
- Nevertheless, the publication of the recent FP7-HEALTH-2013-INNOVATION Call which addresses issues of integrating health concerns in transportation and urban planning has been embraced as a first step in the further synergies between public health and transport policy.
- The outreach of the European Mobility week is large. The main reason might be that there are clear national dissemination channels.

3.4 Main findings theme 1 (promoting integrated policies)

The main findings are presented in the box below.

- The EC supported local authorities in developing sustainable urban mobility plans by providing guidance material, promoting best practice exchange and supporting educational activities for urban mobility professionals. However, the incorporation of transport and mobility issues in the Sustainable Energy Action Plans is only found in some cases and freight transport in sustainable urban mobility plans has not yet been fully addressed.
- Funding opportunities and State Aid have been listed and might be found on the ELTIS website.
- Information on the link between sustainable urban mobility measures and regional policy objectives might be more comprehensive.
- The wider framework for sustainable urban development as well as the link between urban transport and the Trans-European network has been addressed.
- An important element in addressing the wider framework for sustainable urban development is the link between funding and SUMP's.
- The EC created synergy between public health and transport policies through STEER projects and through the Mobility Week. However, it is not apparent that an in-depth exploration of further synergies between public health and transport policy has taken place.
- The EC has done useful actions but to obtain a wide spread take-up "multiplication and dissemination" at member state level is necessary.

4 Theme 2 Focusing on citizens

This theme consists of six actions:

- 4 Platform on passenger rights in urban public transport
- 5 Improving accessibility for persons with reduced mobility
- 6 Improving travel information
- 7 Access to green zones
- 8 Campaigns on sustainable mobility behaviour
- 9 Energy-efficient driving as part of driving education

This theme responds to the main message 'focusing on citizens', which emerged from the Green Paper consultation. It is directly related to White Paper initiatives 21 (passenger rights), 22 (seamless door to door mobility) and 27 (travel information). The box below gives the description of the theme.

High quality and affordable public transport is the backbone of a sustainable urban transport system. Reliability, information, safety and ease of access are vital for attractive bus, metro, tram and trolleybus services, rail or ships. Community legislation already regulates large parts of public transport investment and operations. Transparent contracts have widespread benefits and can stimulate innovation in services and technology. Ensuring a high level of protection of passenger rights, including of passengers with reduced mobility, is also high on the EC's agenda. Legislation is in place for rail services and has recently been proposed for bus and coach services as well as for maritime and inland waterway services⁴³.

4.1 Action 4 Platform on passenger rights in urban public transport

The box below describes the Action⁴⁴.

The EC will moderate a dialogue with stakeholders, including organisations representing operators, authorities, employees and user groups, in order to identify EU-wide best practices and conditions for strengthening passenger rights in urban public transport. Building on sectoral initiatives and complementing the EC's regulatory approach, the aim is to put a set of ambitious voluntary commitments in place, including quality indicators, commitments to protect the rights of travellers and of persons with reduced mobility as well as commonly agreed complaint procedures, and reporting mechanisms.

Below we present the review.

⁴³ COM(2009) 490 final, Action Plan on Urban Mobility

⁴⁴ COM(2009) 490 final, Action Plan on Urban Mobility

4.1.1 Review

Fact finding study on the legal and contractual basis on passenger rights in urban public transport

The EC launched a tender in 2011 for a 12-month fact finding study on the legal and contractual basis on passenger rights in urban public transport. The final report was delivered in November 2012. The scope of the study was to assess the relevant national legislation and the contractual basis for the application of passengers' rights in urban transport in 27 Member States and relevant third countries. A platform meeting with stakeholders has been an integral part of the study.

We conclude that by creating a platform meeting with stakeholders the EC moderated a dialogue with stakeholders, including organisations representing operators, authorities, employees and user groups.

REGULATION (EU) No 181/2011 of 16 February 2011 concerning the rights of passengers in bus and coach transport and amending Regulation (EC) No 2006/2004

On the 1st of December 2010, the Council and the European Parliament reached an agreement on the proposal for a Regulation concerning the rights of passengers travelling by bus and coach. A set of basic rights including non-discrimination and adequate information to passengers, in particular, those with reduced mobility, will apply to all passengers. With this agreement, an important step has been made in strengthening the protection of passenger rights in the EU⁴⁵, and a good basis now exists for the EC to move forward with the dialogue on passenger rights in urban public transport. The provisions of this regulation apply as from the 1st of March 2013.

Fact finding study on the legal and contractual basis on passenger rights in urban public transport

The outcomes of the Fact finding study on legal and contractual basis on passenger rights in urban public transport⁴⁶ show that legal and voluntary provisions have been taken over the EU27 area. The creation of a permanent platform for the exchange of views among the urban public transport operators and users or the expansion of a future horizontal transport platform on passenger rights with related urban transport issues, would be in line with the objectives of Action 4 of the APUM. The consultation with the main stakeholders⁴⁷ in the study shows that there is a conflict of opinions between operators and user organisations:

- According to the transport operators, many voluntary initiatives in this sector are in place, so an intervention from the EC is not considered necessary. Moreover, in times of budgetary constraints, any additional

⁴⁵ Passenger rights in the EU: see <http://ec.europa.eu/transport/passenger-rights/en/index.html>

⁴⁶ CONTRACT NO MOVE/C1/SER/20011-482/SI2.605151, Final report, 15 November 2012, Grimaldi e Associaoi.

⁴⁷ national transport operators, national user associations, European transport operators and employers and employees' associations, European users' associations, associations of municipalities, universities and association of public management authorities.

commitments, even on a voluntary basis, can add costs for the transport operators. The associations consider that it would be appropriate to wait for the full implementation of Regulation (EU) No181/2011.

- Workers' representatives consider a high level of involvement of their representatives useful and indicate that this could help improve operational safety.
- There is a critical approach of the European users' associations towards the current situation to protect passenger rights in urban public transport. They agree that although much has already been done, a lot still remains to be done.
- Regarding possible legal obligations on passenger rights in urban public transport, transport operators, authorities and city organisations agreed that the EC should wait for the full implementation of the existing EU Regulations on passenger rights on transport before adopting a new legislative proposal.
- However, some user organisations see a scope for possible future legislation and an EU platform could be the place to discuss this. Some stakeholders⁴⁸ see *'the need for further action now, such as a charter, a portal or the establishment of a permanent platform for the exchange of best practice on passenger rights and for identification of gaps, quality indicators and possible future legislation'*.
- The proposal for a platform received the interest of some user associations, however, transport operators and authorities would first like to receive a work plan for this. The permanent platform should benefit as there are already working groups on passenger rights in place. UITP indicates that *'a lot of working groups already exist and these are working on a lot of topics'*. According to UITP's point of view, *'there is no added value from creating and funding a platform'*. RATP France indicates that *'if the purpose of the Action 4 is to create a new legislative framework, then the EC should specify what may be the added value of such Action'*.
- The user organisations, which support the idea of a permanent platform, stressed the importance of the platform being a place to exchange best practices on the protection of passenger rights and to identify gaps in this area, to promote raising awareness and communicating with passengers and possibly, discussing guidelines on urban public transport staff training. The latter is a sensitive issue, as some operators objected that discussions on the possible guidelines for staff training should be carried out carefully amongst the stakeholders, taking the situation and the circumstances, as well as the priorities for operators set up by the agreements with the management authorities, into consideration.
- With regard to the proposals and possible initiatives, transport operators, authorities and city organisations have stressed the importance of respecting the principle of subsidiarity.

We conclude that the aim to put – building on sectoral initiatives and complementing the EC's regulatory approach - a set of voluntary commitments in place has not been reached due to the conflict of opinions between operators and user organisations.

⁴⁸ like EDF, AGE-Platform Europe

Quality indicators on public transport

Rules protecting passenger rights and minimum quality requirements for the UPT service have been instated in all the MS. However, there are different options on enforcing passenger rights and the quality criteria of the service. In general, Urban Public Transport (UPT) does not lack rules and provisions of various natures, both legal and voluntary, to protect passenger rights, however, it seems quite difficult to obtain a clear picture of the situation. There is an evident need to coordinate different approaches that have already been taken. The specific issue of quality indicators is addressed in action 16.

4.1.2 Main findings

The box below shows the main findings of the Action on the platform on passenger rights in urban public transport.

- By creating a platform meeting with stakeholders the EC moderated a dialogue with stakeholders, including organisations representing operators, authorities, employees and user groups.
- There is a conflict of opinions between user organisations and public transport operators and authorities in the creation of a Permanent Platform on passenger rights with related urban transport issues. The aim to put – building on sectoral initiatives and complementing the EC’s regulatory approach - a set of voluntary commitments in place has not been reached.
- According to the transport operators, many voluntary initiatives in this sector are in place, so an intervention from the EC is not considered necessary. Moreover, in times of budgetary constraints, any additional commitments, even on a voluntary basis, can add costs for the transport operators.
- Regarding possible legal obligations on passenger rights in urban public transport, transport operators, authorities and city organisations agreed that the EC should wait for the full implementation of Regulation (EU) No181/2011 on passenger rights on transport before adopting a new legislative proposal.
- Some user organisations see the need for further action now, such as a charter, a portal or the establishment of a permanent platform for the exchange of best practice on passenger rights and for identification of gaps, quality indicators and possible future legislation. The user organisations, which support the idea of a permanent platform, stressed the importance of the platform being a place to exchange best practices on the protection of passenger rights, to identify gaps in this area and to promote raising awareness and communicating with passengers.

4.2 Action 5 Improving accessibility for persons with reduced mobility

The box below describes the Action⁴⁹.

Persons with disabilities have the right of access to urban transport on equal terms with the rest of the population, however, in reality access is often insufficient and sometimes non-existent. Considerable achievements have been made for example, on the use of low platform buses. Other modes of public transport such as subways remain often largely inaccessible. The United Nations Convention on the Rights of Persons with Disabilities, signed since 2007 by the European Community and all Member States, contains clear obligations.

Article 9 states 'Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to (...) transportation, both in urban and in rural areas'.

- A) The EC will work with Member States to achieve full compliance with these obligations by including the urban mobility dimension in the EU Disability Strategy 2010-2020*
- B) and by developing appropriate quality indicators and reporting mechanisms.*
- C) It will also support further targeted activities under FP7.*

We present the review following the above mentioned elements A, B and C.

4.2.1 *Including the urban mobility dimension in the EU Disability Strategy 2010-2020*

This section describes the review of:

- *The EC will work with Member States to achieve full compliance with these obligations by including the urban mobility dimension in the EU Disability Strategy 2010-2020*

EU Disability Strategy 2010-2020

The EC adopted the new EU Disability Strategy 2010-2020 on the 15th of November 2010⁵⁰, which includes an initial plan to support the implementation of the UN Convention on the Rights of Persons with Disabilities in the EU. The document is accompanied by a list of Actions for 2010-2015. Accessibility is one of the 8 areas of action covered in the strategy. The UN Convention entered into force for the EU on the 23rd of January 2011 and 16 Member States have already ratified the Convention while the rest are currently in the process of doing so.

We conclude that the urban mobility dimension has been included in the EU Disability Strategy, in its accompanying working document⁵¹ and in accordance with the APUM.

⁴⁹ COM(2009) 490 final, Action Plan on Urban Mobility

⁵⁰ [COM\(2010\)636](#)

⁵¹ <http://ec.europa.eu/social/home.jsp?langId=en>

4.2.2 *Developing appropriate quality indicators and reporting mechanisms*

This section describes the review of:

- *The EC will work with Member States to achieve full compliance with these obligations by developing appropriate quality indicators and reporting mechanisms.*

The specific issue of quality indicators is addressed within the scope of the study on urban mobility data and statistics (Action 16). However, we conclude that the EC funded projects, aimed at developing quality indicators and reporting mechanisms, and develops an Act.

Mediate FP7 Coordination and Support Action

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. Moreover, successful policymaking on accessibility entails good end-user involvement. Mediate has helped strengthen this at European level. The Mediate Project aims to establish a common European methodology for measuring accessibility. This will lead to the development of a self-assessment tool that can be used by policymakers to identify areas where upgrading will improve the accessibility of public transport in their city. In this way, Mediate will contribute to the provision of better and easier access for all.

Regulation on passenger rights travelling by maritime and bus and coach

The regulation on passenger rights travelling by maritime and bus and coach⁵² contain articles related to the provision of accessible information to persons with disabilities.

Access 2 all FP7 Coordination and Support Action

The project intends to develop guidelines and knowledge on mobility schemes, ensuring accessibility of Public Transport (PT) for all. Therefore, it calls for teams with wide geographical coverage, as well as experience in different application areas. ACCESS 2 ALL is a consortium consisting of 9 partners from 7 countries with the aim to achieve cross-sectoral consensus towards standardisation and policies' adoption; consensus amongst all PT operators, stakeholders, planners and end-users is absolutely necessary to achieve accessibility for all parties involved in PT.

ACCESS 2 ALL aims at defining concrete mobility schemes, guidelines and policy recommendations, ensuring accessibility of Public Transport to ALL users, through the coordination of current research efforts, the production of common research Roadmaps, the identification of best practice models and the appropriate use of ICT aids and networks.

⁵²

http://europa.eu/legislation_summaries/transport/mobility_and_passenger_rights/tr0050_en.htm

METPEX FP7 demonstration project

In November 2012, a complementary demonstration project started on the accessibility of urban transport systems (as part of the FP7 Transport Call for Proposals 2012). The selected three-year project METPEX is in response to the need to synthesize methods and knowledge, in order to produce a Pan-European standardised passenger experience measurement tool for use across all transport modes and covering all passenger groups.

European Accessibility Act

The EC is developing a European Accessibility Act dealing with issues under article 9 of the UN Convention on the Rights of Persons with Disabilities, These issues are: built environment, transport and ICT. The legislative initiative aims to improve accessibility of goods and services on the Internal Market.

Several stakeholders state that accessibility of material is not the goal in itself, but an instrument. They state that there should be integrated policies. For example:

- *'Important is that the accessibility of busses and trains is not (seen as) a goal in it self but is seen as an instrument. The mobility possibilities and mobility needs of disabled persons – to be able to reach education, work, social activities- has to be the focus' (KNV, City of Munich);*
- *'There is also a clear link between health, safety, accessibility, attractiveness and urban mobility (policies), which is not always clearly reflected in policy papers' (EPHA);*
- *'Ongoing improvements made in rail stations to enhance assistance and accessibility may in some cases not have the expected impact on the mobility of persons with reduced mobility where such passengers find it difficult to reach the station in the first place. Joined-up action is required, so that coordinated city and spatial planning (including urban planning) policies enhance the mobility of passengers in an integrated manner' (ATOC, CER);*

The conflict of opinions between user organisations and transport operators – as found in Action 4 (passenger rights) - is also found in Action 5 (accessibility for persons with reduced mobility). The reason is that accessibility is one aspect of passenger rights.

- *The AGE Platform Europe 'sees a clear role for the EC in awareness-raising activities, (with support of Member States) evaluation of accessibility features of urban systems using benchmarking and self-assessment tools, ensure user involvement in accessibility interventions in order to plan, monitor and evaluation progresses and funding opportunities. EU-funded projects' results must be taken into account and used as evidence data bases, notably Mediate and AENEAS';*
- *UITP states that 'concerning mandatory requirements, there are various legal acts on European level which regulate accessibility in public transport: Accessibility of vehicles such as the Bus Directive 2001/85/EC or PRM TSI for rail vehicles or mandatory requirements for improving accessibility in rail, waterborne or bus services (regulations 1371/2007, 1177/2010 and 181/2011). There is a limit to what operators can reasonably do without adversely affecting the majority of users in terms of space and fare costs'.*

4.2.3 Support further targeted activities under FP7

Besides the FP7 projects described in the previous paragraph, the EC supported further targeted activities under FP7.

Access City

To promote accessibility in urban environments, the EC launched an annual award called 'Access City'⁵³ in 2010. The award is linked to a competition which is open to all cities and other urban centres with more than 50,000 inhabitants in the EU Member States. This award scheme will showcase and reward the work of cities which proactively support accessibility for persons with disabilities and take exemplary steps to improve accessibility within the urban environment.

CIVITAS

Within the CIVITAS Initiative and funded through the EU Research Framework Programme, a number of new technologies and concepts have been tested to improve the accessibility of urban transport systems for passengers with reduced mobility or disabilities. Examples include demand responsive public transport services or 'talking bus stops.' As announced in the APUM, the EC has continued its commitment to this Initiative and new CIVITAS projects started in December 2012 (Action 15).

IEE

The Intelligent Energy - Europe (IEE) programme has a database of case studies and good practice⁵⁴, which includes projects related to people with reduced mobility or particular needs.

Most respondents state that the Actions have increased interest on accessibility in Urban Public Transport throughout Europe and made public transport services more accessible to people with reduced mobility⁵⁵. Continuation of support on targeted activities under FP7 are found for example in the City-Hub project, which started in September 2012. The application from cities for the Access City Award has almost doubled in 2 years time⁵⁶.

There is a clear need for take-up of the Action. The possibilities for take-up find their arguments in the discrepancy at the level of accessibility between and within Member States, varying between financial possibilities and awareness. Several stakeholders state the importance of disseminating information via several channels to reach more organisations. For example IRU states '*It is important to spread information and good practices among the largest possible number of authorities, businesses and users, including by using private sector channels such as the Smart Move campaign or the Taxi - Anytime, Anywhere initiative and POLIS states 'Polis is involved in a study supporting the EC (DG Justice) with the impact assessment for the EU Disability Act. Preparations with*

⁵³ http://ec.europa.eu/justice/discrimination/disabilities/award/index_en.htm

⁵⁴ <http://www.managenergy.net/casestudies.html>

⁵⁵ IRU, AGE platform Europe, EPHA, Helsinki Region Transport

⁵⁶ In the inaugural edition launched in July 2010, some 66 European cities from 19 EU countries put themselves forward as candidates. The application phase for the Access City Award 2012 closed with 114 cities from 23 EU Member States joining the competition

regards to the entry into force of the bus and coach passenger rights regulation do not reach decentralised authorities at this moment’.

4.2.4 Main findings

The box below shows the main findings of the Action on improving accessibility for persons with reduced mobility.

- The EC included the urban mobility dimension in the EU Disability Strategy 2010-2020 as well as in its accompanying working document.
- The EC funded projects, aimed at developing quality indicators and reporting mechanisms. The specific issue of quality indicators is addressed in action 16.
- The appropriateness of indicators and reporting mechanisms should be based on evaluations as well as stakeholder involvements in accessibility interventions.
- The conflict of opinions between user organisations and public transport operators, as described in action 4, is also valid for action 5 (as accessibility is one of the elements of passenger rights). Operators state that “there is a limit to what operators can reasonably do without adversely affecting the majority of users in terms of space and fare costs”.
- There is a clear link between health, safety, accessibility, attractiveness and urban mobility (policies), including links between policy programmes such as FP7 and WHO Age Friendly Cities programmes and programmes with initiatives from organisations as FIA (<http://www.fiadisabledtravellers.com>).
- To obtain wide-spread take-up “multiplication and dissemination” via several channels, including member states level, is necessary. For example: preparations with regard to the entry into force of the bus and coach passenger rights regulation do not reach decentralised authorities at the moment of the survey.

4.3 Action 6 Improving travel information

The box below describes the Action⁵⁷.

- A) The EC will work with public transport operators and authorities on facilitating the provision of travel information through different media, including information addressing the needs of disabled persons.*
- B) It will also support the development of national and regional multimodal journey planners, and links between existing planners, with the ultimate aim of providing users with a public transport travel portal at EU level on the internet.*
- C) There will be a particular focus on the main nodes in the TEN-T network and their local and regional connections.*

We present the review following the above mentioned elements A, B and C.

⁵⁷ COM(2009) 490 final, Action Plan on Urban Mobility

4.3.1 Facilitating the provision of travel information

This section describes the review of:

- *The EC will work with public transport operators and authorities on facilitating the provision of travel information through different media, including information addressing the needs of disabled persons.*

The EC launched the 1st Smart Mobility Challenge with its website www.eujourneyplanner.eu in order to raise awareness of the general public on this topic⁵⁸. Within the 1st Smart Mobility Challenge⁵⁹, 28 operational journey planners and 22 innovative ideas on how to develop a European multimodal journey planner were submitted, out of which 4 winners from Germany, France, Czech Republic and Italy were selected. The EC wished to foster further debate about innovative solutions in multimodal journey planning, ahead of the ITS World Congress in Vienna in October 2012 to give all stakeholders the opportunity to get in touch with each other.

The website www.eujourneyplanner.eu shows the results of the challenge. Overall, this challenge may complement the findings in the next paragraph about the multimodal journey planners. A relevant question is what the role for the EC should be in the further development of such journey planners. The study on the multimodal journey planner gives clear recommendations on this.

4.3.2 Support the development of national and regional multimodal journey planners, and links between existing planners

This section describes the review of:

- *It will also support the development of national and regional multimodal journey planners, and links between existing planners, with the ultimate aim of providing users with a public transport travel portal at EU level on the internet.*

Study 'Towards a European Multimodal Journey Planner'

Based on EU-funded research, the preliminary insights concerning the status of deployment of multimodal journey planners in the EU (on transnational, national and regional level) have been identified. The promotion of their further deployment was deemed necessary and was included as a specific action in the ITS Action Plan of 2008, Action 1.5. As a next step the EC launched a nine-month study to look into the existing obstacles and requirements in order to come up with a Europe-wide solution (within the framework of the ITS Action Plan - Action 1.5 and linked to Directive 2010/40/EU).

⁵⁸ http://ec.europa.eu/transport/its/multimodal-planners/index_en.htm

⁵⁹ www.eujourneyplanner.eu

The final report of the study⁶⁰ describes examples of multimodal journey planners at regional, national and international level. Different governance schemes and business models are reviewed. It is observed that there is no self-contained value chain of multimodal journey planning in general, because end users usually do not wish to pay for this service as such. There are, however, examples where a self-standing business model has been constructed through the stabilising intervention of public authorities.

Stakeholder feedback has been collected during the mentioned study through an online survey and through a workshop, organised by the study team. Stakeholders are quite consensual:

- On the fact that a multimodal journey planner is a strong tool for promoting modal shift,
- That rail and terrestrial public transport are central pillars of a European multimodal journey planner, while road, air and ferries appear as further important modes,
- With the stepwise approach of DG Mobility and Transport (journey planning first, ticketing later),
- That data reliability is a prime need,
- That the organisational issues are most challenging,
- That the role of the EC should be an active one especially when it comes to establishing a legal framework and promoting standardisation.

The vision raised in the report is that multimodal journey planning is a service to citizens, delivered by many actors, in a non-exclusive way. The following recommendations are given to the EC:

- Regulate the access of journey planner providers to data produced by public authorities and by commercial operators of transport services and facilities
- Progressively extend the scope of legislation on data access
- Coordinate EC policy on different transport modes and on data access
- Support Member States, local authorities and industry in the production of data that does not exist today
- Ensure technical interoperability of data from different sources
- Monitor the compliance to the rules concerning data access
- Define budget needs for upcoming EC finance programmes

Most respondents⁶¹ agree that there is much to be done towards reaching the goal of integrated multimodal travel information within the EU.

- A first result that is mentioned is that there is more travel information available now, which is visible on the streets, as well as on websites. Additional attention is paid to the elderly and disabled (for example text with bigger letters) (*ZIVOT 90, AGE*);
- Secondly, with regard to multimodal journey planners, the portal on trip planners is mentioned as a positive initiative, as well as the study on the status of multimodal journey planners as a useful step towards EU integration of travel information. However, some drawbacks are mentioned here. The question arises of what the follow-up will be and what the role of

⁶⁰ http://ec.europa.eu/transport/its/studies/its_en.htm

⁶¹ e.g. ZIVOT90, Vienna City Administration, ACEA, KNV, STA, City of Munich, AIT, EARPA, IRU, AGE, CER, EPTO, ECF, Tranitalia and POLIS

the EC will be. There is a focus on long distance travel and travel information at urban level should be given more priority (However, one should mention that the Guidelines on this topic were prepared by the Urban ITS Expert Group). A barrier is that buses, coaches and taxis are not included in the majority of the existing journey planners. Administrative hurdles (especially in terms of linking existing multimodal journey planners) are high. It is also mentioned that environmental costs should be part of travel information (*Vienna City Administration, ACEA, KNV, AIT*);

- A third result is that standards and best practices help development in the area of travel information (*STA, City of Munich, POLIS*);
- Fourth, it is mentioned as a result that the market seems to be taking up the challenge and more and more initiatives are taking place involving transport and third party providers. However, it should not be forgotten that public transport is a public service and the responsibility of (local and regional) authorities. There needs to be a balance between market and public involvement (*EPTO, IRU, and CER*).

EARPA states that *'The study on the status of multimodal journey planners is a useful step towards EU integration of travel information. It is questionable what the follow up will be of the smart mobility challenge that generated ideas for the development of journey planners and what the role of the EC should be in this respect'*.

4.3.3 Particular focus on the main nodes in the TEN-T network and their local and regional connections

This section describes the review of:

- *There will be a particular focus on the main nodes in the TEN-T network and their local and regional connections.*

The study does not particularly have a geographical focus. We conclude that the final report describes examples of journey planners at regional, national and international level, not at local level.

POLIS mentions 'The results of the study on the implementation of Action 1.5 of the ITS Action Plan are not known. There is an excessive focus on the long distance multimodal journey planner. The integration of travel information at the urban level should be given a higher priority as it is more likely to impact behaviour and therefore to contribute to support urban, regional and European transport policy objectives. Travel information should be provided with information on travel and environmental costs'.

4.3.4 Main findings

The box below presents the main findings of the Action on improving travel information.

- The EC launched the Smart Mobility Challenge with its website www.eujourneyplanner.eu and raised awareness of the general public on travel information and multi-modal planners.
- There is a focus on long distance travel. There is no particular focus on the main nodes in the TEN-T network and their local and regional connections. Integration of travel information at the urban level should be given a higher priority.
- A European portal covering all issues related to public transport (existing multimodal journey planners, technical documentation, links to providers, ticketing applications, etc.) was mentioned during the public consultation as a potential valuable initiative.
- The quality of travel information varies a lot. The study towards an EU multimodal journey planner states that data reliability is a prime need and give several recommendations on data access.
- Development of local journey planners in the least privileged parts of Europe should be supported.
- For scaling up and take up standardisation is very important. The EC should remain in a neutral position towards technologies.

4.4 Action 7 Access to green zones

The box below describes the Action⁶².

A) The EC will launch a study on the different access rules for the different types of green zones across the EU in order to improve knowledge on how the different systems work in practice.

B) On the basis of the study results, the EC will facilitate the exchange of good practices.

We present the review following the above mentioned elements A and B.

4.4.1 Study on access rules for green zones

In October 2009, the EC launched a study on urban access restrictions⁶³. The final report was presented in December 2010 and provides a comprehensive state-of-the-art overview for urban access restriction schemes implemented in European cities. In addition, it offers a number of areas for possible action at EU level. The ARS (Access Restriction Schemes) study can be easily accessed through the Mobility and Transport section of the EC website. Additionally, a website dedicated to the study exists (www.accessrestriction.eu), where more detailed information on the study work-plan and tasks can be found. A quite extensive and homogenous set of data can be found as well for each city analysed on the possible presence of an access restriction scheme: the primary objective, the type of vehicles targeted by the scheme, the presence of a charge for entering the restricted zone, the time slot of enforcement, the way to identify

⁶² COM(2009) 490 final, Action Plan on Urban Mobility

⁶³ Study on Urban Access Restrictions, Final report, ISIS and PWC, 2010.

vehicles entering the restricted zone, the possible presence of scheme rules on city websites or other national website, and finally, the possible coexistence of a traffic restriction scheme with a Low Emission Zone.

The study recommendations point out that many of the drivers, enablers and barriers experienced by cities that decide to implement an ARS are common for all types of schemes, irrespective of the specific features of the scheme itself.

From the stakeholders' point of view, different criteria for low emission/green zones across the EU can pose problems for vehicles which regularly enter several zones. However, calls for harmonising schemes are misguided, denying cities the flexibility and freedom they need to implement policies to tackle different air quality challenges. Instead, the EC should pursue a range of measures to mitigate many of the problems posed by the existence of different access criteria. Amongst them the following:

- *The promotion of best practices in terms of the consultation required before the introduction of schemes including liaising with key groups representing foreign registered vehicles;*
- *The establishment of a common signifier, compatible with existing signage schemes, that could be used to alert drivers that a scheme is in force;*
- *Ensuring vehicles to be able to register and/or pay required fees remotely (i.e. post or online) so that businesses can ensure their vehicles have the required permission, registration, sticker, etc. before departure.*
- *Encouraging all schemes to provide information in a minimum number of languages to enable effective communication/registration etc.*
- *Enforcing – in the longer term legislation – a compliance with low emission / green zones, building on the directive facilitating cross-border enforcement in the field of road safety 2011/82/EU.*

From the viewpoint of bus, coach, taxi and truck operators, the EC should do more to create a harmonised framework for access to green zones in urban areas.

We conclude that the EC launched a study on the different access rules for the different types of green zones across the EU and improved the knowledge on how the different systems work in practice.

4.4.2 Facilitation of the exchange of good practices

Several respondents embrace the action. The *FIA* states that *'the study on urban access restrictions published at the end of 2010 includes an interesting set of recommendations which can represent a good starting point for the implementation of new concrete actions'*. *POLIS* states that *'the process towards the accessrestrictions.eu website has been very fruitful, and the results are useful, and a basic reference for several of our activities'*. From the view point of *Vienna City Administration*, *'with the study on urban access restrictions the EC covered a field even larger than the proposed green zones, and consequently – as ETRA affirmed – 'provided a good review also by proposing practical*

recommendations to the EU on the definition of a green zone and the different option available'.

However, some stakeholders indicate necessities for the take-up in facilitating the exchange of good practices. As ACEA stated, *'the Study financed by the EC includes useful recommendations. However, the second part of the Action, has not been implemented so far'*. EPOMM states that *'the EC has done what it had committed to do in the APUM nevertheless it could have done better concerning the facilitation of exchange of good practices '*. POLIS highlighted that *'the exchange of good practices has been limited to CIVITAS where some concepts are not investigated (e.g. LEZ)*. However, the reviewers conclude that the study has been published, and the website <http://nl.lowemissionzones.eu> gives Europe-wide information on Low Emission Zones. In this way the EC facilitated the exchange of good practices.

*Website: Low Emission Zones in Europe*⁶⁴

The EC is offering financial support to a website providing an EU-wide and comprehensive dissemination of information on Low Emission Zones (LEZ) in Europe. Over one hundred cities and towns in 11 countries around Europe have, or are preparing LEZ or 'Environmental zones' to help meet the health-based air quality standards. The homepage shows a map with each of the LEZs marked and further information on each city can be found by selecting the name of interest. The website contains a lot of information that can help drivers and vehicle operators to understand LEZ rules, such as those on vehicle emission standards and air quality targets.

The reviewers conclude that the EC supported bringing relevant information together, which is an important starting point for the exchange of experience, and the reviewer conclude that the EC facilitated the exchange of good practices. However, the EC can do more about the facilitation of the exchange of good practices, for example:

- In some cases professional associations, such as *FENEBUS*, pointed out the need to translate the study and adapt the writing style: *'the ARS study is only in English and the style of writing is for people who work on EU affairs. Therefore, it is not easy to understand'*.
- Some respondents indicated that presently insufficient evidence for the effectiveness of green zones and similar schemes seems to be available. They suggest that the EC could help gather and complement the results of studies aimed at exploring the effectiveness and impacts of such schemes.

The reviewers also conclude that within the subsidiarity principle and given the uniqueness of cities the EC can and has to play a role. This is supported by the response of some stakeholders as:

- *KNV* (from The Netherlands), *'EU is slow in developing standards on green zones, causing urban authorities to experiment with their own legislation. For transport companies operating in more than one EU*

⁶⁴ <http://www.lowemissionzones.eu/>

country, in particular in smaller EU countries, and for many EU citizens this causes inconvenience and extra costs’.

- Creating an harmonised framework for access to green zones in urban areas can also be relevant for the EU coach tourism sector, which – as affirmed by IRU – ‘suffers from an increasingly fragmented situation at local level, leading to inefficiencies and rising costs for businesses. This is all the more regrettable since buses and coaches are increasingly recognised by the scientific community as the undisputed environmental champions among collective transport modes. If a legislative initiative is not possible due to the subsidiarity principle, a set of guidelines for municipalities planning to set up green zones should be drafted in order to encourage harmonisation and ensure better proportionality between objectives and measures undertaken. The EC should also support a one-stop-shop at EU level for information, reservations and payments’.

4.4.3 Main findings

The box below shows the main findings of the Action on access to green zones.

- The EC launched and published a study on the different access rules for the different types of green zones across the EU and improved the knowledge on how the different systems work in practice.
- Stakeholders embrace the study as a powerful policy instrument for addressing the major challenges of urban sustainability (e.g. air quality, congestion, the role of non-motorised modes).
- The EC facilitated the exchange of good practices by the publication of the study and the website on Europe-wide low emission zones.
- However, the EC should provide stronger support for the exchange of experience and best practices.
- It is hard to identify best practices, because:
 - The availability of data on the impacts of scheme implementation is extremely limited. There is a need for the assessment of ARS, including evaluation frameworks, key indicators, monetary valuation parameters, minimum data requirements, and methodological guidance.
 - Some respondents indicated that presently insufficient evidence for the effectiveness of green zones and similar schemes seems to be available. They suggest that the EC could help gather and complement the results of studies aimed at exploring the effectiveness and impacts of such schemes.
- The exchange of best practices should be addressed not only to local authorities but also to road operators and road transport service providers.
- Within the subsidiarity principle and given the uniqueness of cities the EC can and has to play a role. The EC should seek the right balance between harmonisation (and the benefits its offers) and the right of local authorities to implement their own solutions.

4.5 Action 8 Campaigns on sustainable mobility behaviour

The box below describes the action⁶⁵.

Education, information and awareness-raising campaigns play an important role in the creation of a new culture for urban mobility.

- A) The EC will continue to support the organisation of campaigns at all levels, including the European Mobility Week.*
- B) For the European Mobility Week, the EC will optimise the existing award scheme and consider a special award to encourage the adoption of sustainable urban mobility plans.*

We present the review following the above mentioned elements A and B.

4.5.1 Support the organisation of campaigns

This section describes the review of:

- *The EC will continue to support the organisation of campaigns at all levels, including the European Mobility Week*

European Mobility Week

The European mobility Week (EMW) is an annual campaign on sustainable urban mobility, through which the EC encourages municipalities across Europe to face the challenge of making the transport system more sustainable and improving the quality of life of their citizens. The specific goal of this campaign is to promote a new culture of urban mobility.

The EMW campaign is a consolidated event that is organised every year by many cities around Europe. Since its introduction in 2002, the EMW has steadily grown and has become an event which involves more than 2,200 cities across the globe. It strongly encourages information exchange and awareness-raising campaigns, according to the objectives identified in the APUM.

Each year the EMW focuses on a particular topic related to sustainable mobility, the 'focal theme'. Local authorities are then required to organise activities for their citizens based on this theme.

In order to reflect the changing annual theme adopted by the EMW and to ensure that audiences do not become confused by the two campaigns, the Sustainable Urban Mobility campaign's own annual theme directly picks up where EMW's annual theme leaves off.

The theme was 'Moving in the right direction' for the year 2012. The communication activities of the SUM campaign took into account the annual theme of the EMW without diluting its own key message.

⁶⁵ COM(2009) 490 final, Action Plan on Urban Mobility

Sustainable Urban Mobility campaign

The EC launched a tender for a three-year Europe-wide awareness-raising campaign on sustainable urban mobility to support the EMW. The work started in January 2012. The campaign included initiatives such as an award for European cities based on their Sustainable urban Mobility Plans and awareness raising activities and events in 31 participating countries: EU Member States, EEA Member States (Iceland, Liechtenstein and Norway) and Croatia.

A website was launched within the Sustainable Urban Mobility campaign: www.dotheightmix.eu.

2010 Consumer Summit

The EC included a high-level workshop on sustainable urban mobility within the 2010 Consumer Summit. The need was identified for a long-term vision to support a cultural shift in urban mobility linked to behavioural change, sustainable urban planning and increased local government support of accessible, safer cities for road users and pedestrians.

As noted by the European Tyre Association 'in the context of urban mobility, efforts need to be stepped up to make drivers responsible through an integrated approach that includes vehicle technology, driver behaviour and road infrastructure. A key point is improving the awareness of drivers of the role of tyres and the need to maintain them in good conditions. The experience of the Department for Transport of the UK shows that tyre safety campaigns have helped reduce the number of deaths on UK roads from tyre related accidents from 44 in 2006 to 34 in 2008. We urge the EC to invest in such kind of campaigns in the context of the APUM'.

We conclude that the EC continued to support the organisation of campaigns at all levels, including the European Mobility Week.

4.5.2 Award scheme European Mobility Week and SUMP

The Sustainable Urban Mobility campaign included an award for European cities based on their Sustainable urban Mobility Plans. On the 6th of March 2013 the first SUMP award ceremony took place in the framework of the SUM campaign.

The reviewers conclude that the special award to encourage the adoption of sustainable urban mobility plans has been implemented.

We conclude that the award scheme has been changed: from the registration of cities (as in the European Mobility Week) to the registration of awareness-raising actions promoting sustainable urban mobility which is open to everyone (as in the Sustainable Urban Mobility Campaign). 262 actions aimed at promoting a more sustainable approach towards transport usage have been registered through the 'Do the right Mix' website. These actions meet the eligibility and evaluation criteria of the EC's campaign, and are visible on a map available for all the website's visitors; information regarding the actions implemented can be found by clicking on the map. The actions that have so far been registered can be grouped, according to the country they belong to and as follows: 91% from EU's 27 Member States and 9% from Norway, Iceland, Liechtenstein and Croatia.

The main subjects considered by participants have been: local campaigns, summer university, car-sharing and carpooling schemes and Pedibus.

In order to assure both a consistent campaign design and the uptake of the campaign material by locally, regionally and nationally funded actions across the EU, a maximum of flexibility was needed. For this reason a 'campaign toolkit' has been produced, published in English and made electronically available to facilitate speed, ease and rapidity of dissemination, as well as to allow for quick and useful updates.

The toolkit for registered actions is a simplified version of the toolkit for the supported actions. This is in order to give the latter toolkit actions the higher visibility they deserve. As of the 18th of December 2012, the 'Do the right mix' website, has recorded 21,358 visits, 94,747 page views, with an average time on the site of 5,19 minutes and 4,6 actions per visit.

During the second half of 2012 Facebook, Twitter and YouTube accounts were set-up and launched, including a clear posting policy for Facebook. As of the 6th of December 2012:

- Facebook registered 253 fans and 98 posts, with a highest daily peak of 3,295 individuals for one piece of information and 138 individuals as the average daily peak for one piece of information.
- Twitter recorded 179 followers, 394 posts, the highest recorded impressions @righmixEU equalled 20,052 with an average of 7,136.
- YouTube had 3,389 views of the dedicated channel.

According to the general aim of the Action (supporting education, information and awareness campaigns on urban sustainable mobility) it has been stated by local administrations, such as in *Vienna*, that '*EC's activities are quite extensive and probably support of local initiatives is the most important factor*' even if '*impact and effectiveness are extremely difficult to measure when dealing with measures in the field of awareness raising*'. More in depth, the EMW is considered *very visible* by several consumer associations and it appears that the EC has developed many useful instruments complementary to this annual event for fostering the dissemination and awareness about sustainable mobility behaviour. As *UITP* states '*that EMW activities should be expanded*'. Additionally, as emphasised by *ETRA*, '*the launch of the award dedicated to cities developing a Sustainable Urban Mobility Plan is strongly welcomed*' (*ETRA*).

The 'Do the Right Mix' initiative is strongly welcomed by several respondents:

- as the *European Cyclists' Federation* indicated, '*even if it is not yet very well adopted, it could be improved in the future when the awareness raises*'.
- *EPOMM* also welcomes the campaign and states that '*this initiative answers one of the weak points, especially on the lack of awareness raising actions. From the APUM, it seems sometimes that many actions or goals can only be achieved through infrastructure and vehicle technologies, which is not the reality! In fact much can be done at the level of urban design and planning, speed and traffic restrictions (such as traffic calming areas) and the education and awareness of policy makers and citizens for a more sustainable mobility*'.

A common suggestion to the EC that comes from stakeholder consultation is to continue information and awareness activities; amongst them a special focus should be placed on activities which offer support to local initiatives:

- *FIA affirms that 'it is important to promote awareness initiatives and to develop mandatory educational programmes on sustainable and safe mobility starting at school'.*
- *ETRA is of the opinion that 'further campaigns are essential to make the public and policy makers at all levels aware of positive aspects of powered two wheelers such as flexibility, affordability and convenience only to name a few'. Every year, in fact, ETRA organises the event 'Sustainable 2wheels' in the framework of the European Mobility week. The event aims at showing how sustainable two wheelers can contribute to sustainable mobility within urban areas.*
- *It is recognised by city networks, such as POLIS as a key step to 'further involve civil society in addressing the sustainable urban mobility challenges and engaging exchanging of best practices but there is the need to extend the campaign initiative beyond the three initial years and to more than the six countries currently in the focus'.*
- *The Instituto de Mobilidade e dos Transportes terrestres suggests that 'the promotion should also be adapted to each country in terms of culture, way and style of life, language: what is needed in a northern country to make people change their mode of travel could be different from what makes people change in a southern country. It is crucial that these campaigns are more easy to understand in order to reach citizens and municipalities and are not closed to who already works in the area and has already wears the 'sustainable mobility t-shirt'.*

4.5.3 Main findings

The box below shows the main findings of the Action on campaigns on sustainable mobility behaviour.

- The EC continued to support the organisations at all levels, including the European Mobility week.
- A special award to encourage the adoption of sustainable urban mobility plans has been implemented.
- The award scheme has been changed: from the registration of cities (as in the European Mobility Week) to the registration of awareness-raising actions promoting sustainable urban mobility which is open to everyone (as in the Sustainable Urban Mobility Campaign).
- The Sustainable Urban Mobility campaign (do the right mix) is recognised as a key step to further involve the civil society in addressing the sustainable urban mobility challenges and engaging the exchange of best practices. It is a key step to involve “multipliers and disseminators” at all levels to obtain a wide-spread take-up.
- Promotion should be adapted to each country in terms of culture, way and style of life, language.
- The EC should provide a framework for a EU-wide campaign, complemented by national structures that support local activities (combination of top-down and bottom-up).

4.6 Action 9 Energy-efficient driving as part of driver education

The box below describes the action⁶⁶.

Energy-efficient driving is already a mandatory part of the training and testing of professional drivers.

The EC:

- *will discuss with Member States, within the regulatory committee on driving licences, if and how energy-efficient driving could be included in driving tests for private drivers,*
- *and will consider follow-up actions*
- *and give respective support.*

This topic will also be addressed in the next Road Safety Action Programme.

Below we present the review.

4.6.1 Review

On the 20th of July 2010, the EC adopted the Communication ‘Towards a European road safety area: policy orientations on road safety 2011-2020’ and committed in this context, to explore how to reinforce the key elements of eco-driving within the curricula of the theoretical and practical driving licence tests.

In accordance with the policy orientations 2011-2020, the EC initiated a modification of the driving licence legislation with a view to include energy-

⁶⁶ COM(2009) 490 final, Action Plan on Urban Mobility

efficient driving in driving tests for private drivers ('B' licences). Work carried out with Member States' experts led to the adoption in November 2012 of EC Directive 2012/36/EU^[2] and thereby, amending Directive 2006/126/EC on driving licences. According to the new provisions, applicable as of the 1st of January 2014, the ability of the applicant to drive economically and in a safe and energy-efficient way shall be assessed by the examiner during the driving test.

The EC furthermore supported several projects:

- *ECODRIVEN* (2006-2008, www.ecodrive.org) was a synchronised European-wide eco-driving campaign aimed at drivers of passenger cars, delivery vans, lorries and buses in nine EU countries;
- *ECOWILL* project (2010-2013, www.ecodrive.org/en/home/ecowill_the_project). A first step was a state-of-the-art study performed in 13 European countries⁶⁷.
- *ECOeffect* project (2012, www.ecoeffect.org) is a focused training initiative to deliver measurable benefits to the trucking, freight, and haulage communities through theoretical and practical courses. The ECOeffect training programme is available in the Czech Republic, Poland, and Romania and is supported by the EC (Intelligent Energy Europe programme).
- *ecoDriver* project (2012-2015, www.ecodriver-project.eu) 'Supporting the driver in conserving energy and reducing emissions' is a European research project (FP7) with twelve partners and targets a 20% reduction of CO₂ emissions and fuel consumption in road transport, by developing feedback strategies to encourage the driver to adopt green driving behaviour. The ultimate goal is to deliver the most appropriate eco-driving advice or feedback for any given situation.
- *UDRIVE* (2012-2016, www.udrive.eu) will perform the first large-scale European Naturalistic Driving (ND) study, building on the experiences of the PROLOGUE feasibility study and various Field Operational Tests (FOTs). The main purpose is to obtain in-depth knowledge of the safety-related driver behaviour, however, eco-driving behaviour is part of the study as well.

Several stakeholders embrace the action:

- *'The Communication 'Towards a European road safety area' has led to right direction and concrete results (though might not have reached all countries);*
- *Projects like ECOWILL and ECODRIVEN seem to have concrete results;*
- *Ecodriving is useful, especially when supported by ITS'.*

^[2] OJ L 321, 20.11.2012, p. 54.

⁶⁷ Overview on the status of eco-driving integration in the driver education and testing. Deliverable D.2.1 of ECOWILL project, Nov. 2011. www.ecodrive.org

4.6.2 Main findings

The box below shows the main findings of the Action on Energy-efficient driving as part of driver education.

- By the adoption in November 2012 of EC Directive 2012/36/EU the ability of the applicant to drive economically and in a safe and energy-efficient way shall be assessed by the examiner during the driver test as per 1-1-2014. Due to this Directive the measure is also compulsory with regard to private drivers.
- The EC funded several projects (ECODRIVEN, ECOWILL, ECOeffect, ecoDRIVER, UDRIVE)

4.7 Main findings theme 2 (focusing on citizens)

The main findings are presented in the box below.

- The EC implemented several actions with a focus on citizens:
 - By creating a platform meeting with stakeholders the EC moderated a dialogue with stakeholders, including organisations representing operators, authorities, employees and user groups.
 - The EC included the urban mobility dimension in the EU Disability Strategy 2010-2020 as well as in its accompanying working document.
 - The EC funded projects, aimed at developing quality indicators and reporting mechanisms. The specific issue of quality indicators is addressed in action 16.
 - The EC launched the Smart Mobility Challenge with its website www.eujourneyplanner.eu and raised awareness of the general public on travel information and multi-modal planners.
 - The EC launched and published a study on the different access rules for the different types of green zones across the EU and improved the knowledge on how the different systems work in practice.
 - The EC facilitated the exchange of good practices by the publication of the study and the website on Europe-wide low emission zones. However, the EC should provide stronger support for the exchange of experience and best practices. At the same time it is hard to identify best practices in access to green zones, because:
 - The availability of data on the impacts of scheme implementation is extremely limited. There is a need for the assessment of ARS, including evaluation frameworks, key indicators, monetary valuation parameters, minimum data requirements, and methodological guidance.
 - Some respondents indicated that presently insufficient evidence for the effectiveness of green zones and similar schemes seems to be available. They suggest that the EC could help gather and complement the results of studies aimed at exploring the effectiveness and impacts of such schemes.
 - The EC continued to support the organisations at all levels, including the European Mobility week.
 - A special award to encourage the adoption of sustainable urban mobility plans has been implemented.
 - By the adoption in November 2012 of EC Directive 2012/36/EU the ability of the applicant to drive economically and in a safe and energy-efficient way shall be assessed by the examiner during the driver test as per 1-1-2014. Due to this Directive the measure is also compulsory with regard to private drivers.
 - The EC funded several projects (ECODRIVEN, ECOWILL, ECOeffect, ecoDRIVER,UDRIVE)

- There is a conflict of opinions between user organisations and public transport operators and authorities in the creation of a Permanent Platform on passenger rights with related urban transport issues. The aim to put – building on sectoral initiatives and complementing the EC’s regulatory approach - a set of voluntary commitments in place has not been reached.
- There is a clear link between health, safety, accessibility, attractiveness and urban mobility (policies), including links between policy programmes such as FP7 and WHO Age Friendly Cities programmes and programmes with initiatives from organisations as FIA (<http://www.fiadisabledtravellers.com>).
- There is no particular focus in travel information on the main nodes in the TEN-T network and their local and regional connections. Integration of travel information at the urban level should be given a higher priority.
- The registration for the Sustainable Urban Mobility Campaign (do the right mix) is open to everyone and is recognised as a key step to further involve the civil society in addressing the sustainable urban mobility challenges and engaging the exchange of best practices. It is a key step to involve “multipliers and disseminators” at all levels to obtain a wide-spread take-up.
- The EC should provide a framework for a EU-wide campaign, complemented by national structures that support local activities (combination of top-down and bottom-up).

5 Theme 3 Greening Urban Transport

This theme consists of four actions:

Research and demonstration projects for lower and zero emissions vehicles

1. Internet guide on clean and energy-efficient vehicles
2. Study on urban aspects of the internalisation of external costs
3. Information exchange on urban pricing schemes

This theme responds to the main message 'greening urban transport', which emerged from the Green Paper consultation. The box below gives the description of the theme.

'Environmentally friendly policies have been introduced in many cities across the EU. Action at EU level can help to strengthen markets for new, clean vehicle technologies and alternative fuels. This will directly support EU industry, promote healthy environments and contribute to the recovery of the European economy. By making users pay for the external costs which they cause (environmental, congestion and other costs) according to the polluter pays principle, the internalisation of external costs can encourage transport users to switch over time to cleaner vehicles or transport modes, to use less congested infrastructure or to travel at different times. EC rules on the charging of heavy goods vehicles for the use of infrastructure do not prevent the non-discriminatory application of regulatory charges in urban areas to reduce traffic congestion and environmental impacts⁶⁸.

⁶⁸ COM(2009) 490 final, Action Plan on Urban Mobility

5.1 Action 10 Research & Demonstration projects for lower and zero emissions vehicles

The box below describes the action⁶⁹.

The EC will continue its support for research and demonstration projects funded through the Seventh Framework Programme for research and technological development (FP7) to facilitate the market introduction of lower and zero emissions vehicles and alternative fuels, aiming to reduce dependency on fossil fuels. This was done, for example, through the CIVITAS Initiative⁷⁰ as well as projects on the use of hydrogen, bio fuels and hybrid vehicles in urban transport.

In the framework of the European Economic Recovery Plan, the EC has launched the European Green Cars Initiative⁷¹.

In 2009, the EC will fund new projects related to electric vehicles, which will cover batteries, electric power trains and auxiliaries, information and communication technologies and an 'electromobility' demonstration project. This project will focus on electric vehicles and related infrastructure in urban areas and it will integrate national initiatives and support the standardisation of recharging infrastructure.

The section below presents the review.

5.1.1 Review

This Action has been implemented via several activities:

- CIVITAS
- European Green Cars Initiative
- The Fuel Cells and Hydrogen Joint Undertaking
- Green eMotion
- FR-EVUE
- Clean city buses to support Public Transport
- Clean Power for Transport package.

The review will follow the above mentioned activities.

CIVITAS

Within CIVITAS, which is supported by the research Framework Programmes, several demonstration projects with clean and energy-efficient vehicles are currently ongoing in a number of European municipalities and thereby, testing a wide range of technologies under real-life conditions. Experiments with hybrid buses and retrofitting vehicles are good examples of CIVITAS initiatives where the feasibility of lower emission techniques are tested in local circumstances. The

⁶⁹ COM(2009) 490 final, Action Plan on Urban Mobility

⁷⁰ www.civitas.eu.

⁷¹ http://ec.europa.eu/research/transport/info/green_cars_initiative_en.html.

EC support for the demonstration of these technologies through CIVITAS will therefore, be continued and stepped up (see Action 15).

European Green Cars initiative

The European Green Cars Initiative (EGCI) is one of the three Public Private Partnerships (PPP) of the European Economic Recovery Plan announced by the President of the EC on the 26th of November 2008. The objective of the initiative is to support R&D on technologies and infrastructures that are essential for achieving breakthroughs in the use of renewable and non-polluting energy sources, safety and traffic fluidity.

Since the launch of the EGCI, the EC has set up a coherent approach in defining priorities for the 7th Framework Programme and implementing common work programmes and individual projects. This was a coordinated effort between the Directorates General for Research, Information Society and Media, Mobility, Environment, as well as Enterprise and Industry. A Roadmap on electrification was published and a multi-annual plan prioritising the topics for implementation in calls for proposals for the 7th Framework Programme was presented.

Four rounds of calls have been launched (2009-2012), covering a wide range of relevant technologies and topics, related to different types of electric vehicles and the charging infrastructure. In 2010, a dedicated budget was made available for supporting a joint call of public authorities within Member States and at regional level within the framework of ERA-Net Plus (EN+ Electro-mobility). The result so far is an impressive project portfolio with more than 60 projects in the area of electrification and new projects expected as a result of the 2012 call. This includes RTD projects and (large) Demonstration projects (including Green eMotion).

A new Multi-annual Roadmap for the Contractual PPP 'European Green Vehicles Initiative' is under development, as an input for future European R&D Programming under Horizon 2020.

According to ACEA 'The Green Cars Initiative has ensured that the industrial application is fully taken into account in the creation of programmes and R&D projects in this technological domain, which creates a solid platform for future commercialisation of the results of research.' NVGA states that 'The overall focus of this initiative on electric vehicle and HFC proves not be feasible. The Green Car initiative is now supporting the demonstration of HD trucks running on liquefied methane, but the overall support of mature technologies, namely natural gas & biomethane for facilitating a stronger introduction of particularly this technology has been pretty low so far'

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) 2012

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) is a unique Public Private Partnership supporting research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Its aim is to accelerate the market introduction of these technologies, realising their potential as an instrument in achieving a carbon-lean energy system. Fuel cells, as an efficient conversion technology and hydrogen, as a clean energy carrier, have a great potential to help fight carbon dioxide emissions, to reduce dependence on hydrocarbons and to contribute to economic

growth. The objective of the FCH JU is to bring these benefits to Europeans through a concentrated effort from all sectors.

The FCH JU supports long-term and breakthrough-orientated research, research and technological development, demonstration and support actions, including pre-normative research. Some 10 projects have so far been awarded in the application area Transport and Refuelling Infrastructure. Calls are expected until 2013.

Green eMotion (2011)

Green eMotion is the largest demonstration project for electro-mobility in Europe. The project is part of the 2010 Work Programme of the EGCI (Sustainable Surface Transport) with a consortium counting 43 partners. For a project duration of 4 years, Green eMotion is developing specific solution proposals, including setting up a European market place for electro-mobility and optimised infrastructure solutions for electricity supply networks and charging systems, as well as recommendations for standardisation. The project involves 10 demo regions in 8 countries with approx. 2,000 electric cars and more than 2,500 charging points. For more information see <http://www.greenemotion-project.eu/about-us/index.php>.

FR-EVUE (2012/2013)

FR-EVUE is a large demonstration project for clean city logistics. It combines the use of vehicles with innovative urban freight logistics. Eight of Europe's largest cities, including 6 capitals, will demonstrate that electric vehicles operating 'last mile' freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system. The consortium consists of 30 partners and is led by the City of Westminster, London.

Clean city buses to support Public Transport: HCV and EBSF projects

Despite a relatively low contribution to CO2 emissions from transport, clean and efficient city buses will contribute to the development of sustainable urban public transport. Several technologies may be applied here on the shorter and longer term. Several projects have been and will be funded within FP7.

Firstly, Hybrid Commercial Vehicle (HCV) is an FP7 EU-funded demonstration project for reducing the emissions of climate gases and other emissions in urban areas. The HCV project aims to enhance the further reduction of fuel consumption and to decrease the costs of a hybrid system. Test methods, certification procedures and subsystems will be further developed and the market opportunities and barriers for hybrid commercial vehicles will be evaluated in conjunction with commercial vehicle operators in a user forum. The different hybrid technologies will be demonstrated in four vehicles from four different manufacturers throughout large parts of Europe and evaluated in real-life situations.

Clean bus transport operation is also part of the EBSF (European Bus System of the Future) project (FP7, 2008-2012). EBSF was the largest project to support busses in Europe under FP7 which, for the first time, included the five main European bus manufacturers. Prototypes of sub-systems, demonstrator buses and infrastructures, a new standardised IT platform and new operations were

tested and validated in seven European cities. In addition, a Roadmap was developed.

European Electromobility Observatory

Since we currently are in the process of testing and early implementation of low and zero emissions vehicles, it is important for policymakers at all levels and for other stakeholders to get objective facts regarding the different aspects that are important for the further development of electro-mobility.

HyER, the partnership between European regions that focused on the development of electro-mobility (including hydrogen), selected a consortium through an EC call for tenders to set up a European Electro-mobility Observatory (EEO). This EEO collects data from field tests and demos in European regions and cities, analyses and disseminates this data in the network and to other stakeholders. The EEO will be an important tool to monitor the Clean Power for Transport package.

Clean Power for Transport package – Alternative fuels for sustainable mobility in Europe

The Clean Power for Transport package aims to facilitate the development of a single market for alternative fuels for transport in Europe:

- A Communication lays out a comprehensive European alternative fuels strategy (COM(2013) 17), for the long-term substitution of oil as energy source in all modes of transport.
- A proposal for a Directive on the deployment of alternative fuels infrastructure (COM(2013) 18), requires Member States to adopt national policy frameworks for the market development of alternative fuels and their infrastructure, sets binding targets for the build-up of alternative fuel infrastructure, including common technical specifications, and it defines the way of fuel labelling at refuelling points and on vehicles to ensure clarity in the consumer information on vehicle/fuel compatibility.
- An accompanying Impact Assessment (SWD(2013) 5/2) summarised in the Executive Summary of the Impact Assessment (SWD(2013) 6/2) evaluates cost and benefits of different policy options and finds best conditions for a comprehensive coverage of the main alternative fuel options.

The Clean Power for Transport package builds on preparatory work and consultations with industry and civil society, the wider public, and public authorities:

- The work of experts from industry and civil society in the European Expert Group on Future Transport Fuels has been summarised in a report on "Future Transport Fuels" and a report on "Infrastructure for Alternative Fuels".
- National Experts from the Member States provided recommendations on the market development of alternative fuels in a report of the Joint Expert Group Transport & Environment.
- The CARS 21 High Level Group report assesses the prospects of alternative fuels and gives recommendations on the necessary build-up of infrastructure.
- Different scenarios of alternative fuel development have been investigated in the "Study on Clean Transport Systems". Different

options of alternative fuels infrastructure build-up have been evaluated in the "CTS Implementation Study on Alternative Fuels Infrastructure" assessed different options to develop an EU-wide alternative fuels infrastructure.

Several stakeholders embrace the action due to:

- The uptake of industrial applications in R&D programmes;
- Improved awareness of industry regarding renewable sources;
- Good positioning of the EC for standards will lead to efficiency;
- Different programmes led to usable results (however, the effect of the Clean Vehicles Directive is unclear);
- The positive effects of demonstration projects and the CIVITAS programme (including unique experience).

Some stakeholders had remarks on the uptake and the impact of the action:

- Green cars are still very expensive, not cost-beneficial for ordinary drivers;
- Depreciation rates are too high (batteries).
- Only pilot schemes have been supported, uptake by the public is unknown;
- € 5 billion investment in the European Green Cars Initiative with a result of 8,700 battery electric vehicles registered.

Some stakeholders consider the action as too much car oriented:

- *Trenitalia* believes that 'The Action is too much focused on private vehicles and road transport. Trenitalia believes that structural changes in Europe's transport system have to take place to ensure that the EU environmental objectives are reached. Against this background, changes should be based on natural complementarities between transport modes. For example, electrification of surface transport is already achievable with existing technologies using electrified railways'.
- 'The focus of Action 10 is too car-oriented and industry-led. Cities and public transport authorities as mobility service provider should lead the way in cooperation with industry in PPP. In particular electric public transport with trolleybus or tram systems is a key-technology area and the backbone for future smart city solutions....'

5.1.2 Main findings

The box below shows the main findings of the Action on research & demonstration projects for lower and zero emissions vehicles.

- The EC continued its support for research and demonstration projects and funded new projects related to electric vehicles, including an 'electromobility' demonstration project.
- Major recent and older initiatives of the EC in the area of clean vehicles are directly or indirectly related to APUM. These initiatives have led to an impressive number of projects and actions that support the introduction of vehicles on more or less clean energy (bio fuels, hydrogen, and electricity).
- Some stakeholders (from non-automotive background) state that the focus of this Action is a bit too car-oriented and industry-led.
- It is evident that the described initiatives of the EC boosted industrial developments in the area of electric and fuel-cell vehicles and the introduction of these technologies in urban applications. However, these technologies are still in the phase of pilot schemes and mass market uptake is still unsure.
- At the same time it is important to realise that electro-mobility is not the sole solution for (near) zero transport and mobility, though important in urban areas. Conventional-fuelled vehicles still have significant room for improvements, in terms of energy consumption and CO₂ emissions. In addition, different liquid and gaseous alternative fuels will be part of the fuel mix in the decennia to come.

5.2 Action 11 Internet guide on clean and energy-efficient vehicles

The box below describes the action⁷².

The EC will continue to develop an internet-based guide on clean and energy-efficient vehicles, including an overview of the market, legislation and support schemes. The website will also provide support for the joint procurement of vehicles for public services while market developments will be monitored to preserve competition. This service will facilitate the implementation of the new Directive on clean and energy-efficient vehicles⁷³.

Below we present the review.

⁷² COM(2009) 490 final, Action Plan on Urban Mobility

⁷³ Directive 2009/33/EC.

5.2.1 Review

Directive on the promotion of clean and energy-efficient road transport vehicles

The Council of Ministers and the European Parliament adopted a new Directive on the promotion of clean and energy-efficient road transport vehicles on the 23rd of April 2009⁷⁴ and a first monitoring report on the application of this Directive will be provided by the EC at the end of 2012.

At the time of writing the review of the APUM, the first monitoring report on the application of the Directive was not available. This report should form the basis of the findings on the monitoring of the application within the directive, including the monitoring of market developments to preserve competition.

Website on clean and energy-efficient vehicles

To facilitate the implementation of this Directive, the EC launched an EC website on 'Clean and Energy-Efficient Vehicles' in 2009, with a legislation guide, information on joint procurement and references to EU funded projects related to the Directive.

Clean Vehicle Portal

In addition, the EC launched an independent website in December 2010, the 'Clean Vehicle Portal'⁷⁵, which facilitates EU-wide information on lifetime costs of energy consumption and emissions of pollutants of actual vehicles on the market, as well as on existing procurement rules and incentive schemes for clean vehicles and market shares of clean vehicles (covering passenger cars, light commercial vehicles, heavy goods vehicles and buses). It provides access to Europe's largest vehicle database with individual data output and calculations for each European Union Member State. The clean vehicle portal also gives access to a lifetime cost calculator with possibilities to calculate individual costs.

In the period between December 2010 and January 2013, the website received in total, around 390,000 visits and 900,000 page views. During this period, the following was registered with regards to the different specified pages:

- Information on vehicles: around 11,000 visits, around 330,000 page views;
- Information on procurement: around 3,500 visits, around 13,000 page views;
- Information on EU policy packages: around 4,500 visits, around 11,500 page views;
- Information per Member State: around 40,000 visits, around 87,000 page views.

Possibilities to raise awareness

POLIS and KNV specified take-up possibilities to raise awareness. 'The EC could make a better use of its channels for the promotion of the portal. For instance its promotion at CIVITAS event, including training event, should be encouraged. Improve outreach and promotion for the tool (Polis)'. 'Give the national platforms direct support and link them to an EU-wide network. Realise the role of Action 11

⁷⁴ OJ L 120, 15.5.2009.

<http://ec.europa.eu/transport/themes/urban/vehicles/directive/>

⁷⁵ <http://www.cleanvehicle.eu/>

(Internet guide on clean vehicles) for achieving results in Action 10 (Research and Demonstration projects for lower and zero emissions vehicles) and for the ultimate aim: harmonisation of technical standards` (Koninklijk Nederlands Vervoer)

Financial context

Other stakeholders raised the issue that promotion of clean and energy-efficient vehicles is not a goal in itself. To reach the goals behind the promotion, one should also focus on the financial context. *'The site is a good initiative but the main problems on the choice for a cleaner vehicle cannot be reduced to an internet site, and that is not the main issue. The car industry has means to promote their cleaner vehicles (Instituto de Mobilidade e dos Transportes terrestres)'. 'The EC should not only promote the use of clean and energy-efficient vehicles but should ensure that required investments, opportunities arising from them and legal certainty are guaranteed for a reasonable period of time in order to allow road transport operators to obtain a return on investment on the purchase of modern vehicles that meet the highest environmental, safety and comfort standards (International Road Transport Union)'*.

The IRU's remark refers to the gap between the costs in real-money between green and traditional vehicles, which have to be brought up by the buyer. Baltic cities also refer to this situation. There is a link with Action 12 (Study on Urban Aspects of the Internalisation of External Costs).

Possibilities for take-up of the action

The EC is currently working to further expand the functionality of the Portal. In this context, stakeholders gave their suggestions for take-up actions.

'Improve the portal: It gives sometimes inaccurate and misleading information, for instance:

- *Many different models of a vehicle type: simplify categories of vehicles;*
- *Hybrid is not a category of fuel but a technology to improve fuel efficiency - categorisation should solely focus on fuel difference;*
- *Ranking of different models is sometimes difficult to understand and confusing;*
- *Information on clean vehicle portal is duplicated from website of the vehicle manufacturers;*
- *For the calculation of energy-efficiency of commercial vehicles, load capacity is crucial' (ACEA, European Automobile Manufacturers Association).*

Most stakeholders appreciate the website as a first step and embrace the EC's work to expand its functionalities. *Polis 'supports the further update and improve the Clean Vehicle Portal, as planned within the STEER programme'. The City of Prague 'supports all further extensions; 'the more the better'. 'The effect deriving from the use of tyres with improved safety and environmental performance will be more immediate since tyres are replaced on average 3,7 times in the life of a car (and more frequently in the case of HCV). (The European Tyre and Rubber Manufacturers' Association).'*

Scope of the website

'The proposed internet guide on clean and efficient vehicles should be completed with the development of internet tools to compare energy consumption, CO2- and exhaust atmospheric emissions of different urban transport modes, based on the existing calculators Ecopassenger (www.ecopassenger.com) and EcoTransit (www.ecotransit.org). These calculators are an official partner of the EC Sustainable

Energy Europe Campaign. The development of such calculators is a requirement under Action 29 (carbon footprint calculators) of the 2011 Transport White Paper. It would allow for a comparison between different modes of transport, therefore helping to make sustainable choices for the transport of freight and passengers and promote eco-responsible transport behaviours (The Community of European Railway and Infrastructure Companies (CER))

'Even if the Directive on the promotion of clean and energy-efficient road transport vehicles does not apply to the bicycle, it should be included in the guide and website, being a vehicle in its own right, and the mode of transport that is clean and energy-efficient by excellence (the European Cyclist Federation)'. 'To reach the aim of the White Paper on Transport, name the promotion of the use of 'smaller, lighter and more specialised vehicles' in urban areas, the EC, instead of focusing on the use of clean and energy-efficient four-wheels, should promote the use of alternative transport modes which are already available, such as powered two wheelers in general and in particular electric scooter and electric motorcycles (European Two wheels Retailers)'. 'Support the development of a CO2 measurement methodology which takes into account real driving cycles. Help developing sustainable funding mechanisms for public transport in cities such as further investigating in internalisation of external costs in urban transport (UITP)'.

These stakeholders propose to enlarge the original scope from road vehicle choice to mode choice. The directive is specifically aimed at road vehicles, making the present scope of the website in line with the directive. However, the objective of mode change towards greener modes (slow modes and public transport in passenger transport, rail, water and pipeline in freight transport) is in line with the policies from the WPT 2011.

5.2.2 Main findings

The box below shows the main findings of the action on internet guide on clean and energy-efficient vehicles.

- The EC continued to develop an internet-based guide on clean and energy-efficient vehicles (the Clean Vehicle Portal).
- This portal facilitates EU-wide information on lifetime costs of energy consumption and emissions of pollutants of actual vehicles on the market as well as on existing procurement rules and incentive schemes for clean vehicles and market shares. It also gives access to a lifetime cost calculator.
- The EC can raise awareness and obtain wide-spread take-up by activating dissemination at member states level. This might be done by linking national platforms to an EU-wide network.
- Fleet owners (both public and private) should be able to obtain a return on their investment. Currently there is a gap between the costs in real-money between green and traditional vehicles. This is related to action 12 (Study on Urban Aspects of the Internalisation of External Costs).
- The directive is specifically aimed at road vehicles, making the present scope of the website in line with the directive. However, extending the objective to include mode change towards greener modes (slow modes and public transport in passenger transport, rail, water and pipeline in freight transport) should be in line with the policies from the WPT 2011.

5.3 Action 12 Study on urban aspects of the internalisation of external costs

The box below describes the action⁷⁶.

Once the EU framework for internalisation of external costs is established, and taking into account the conclusions of the debate launched by the Communication on a sustainable future for transport, the EC will launch a methodological study on the urban aspects of the internalisation. The study will look at the effectiveness and efficiency of various pricing solutions, including implementation issues such as public acceptability, social consequences, cost recovery, availability of ITS (intelligent transport systems) tools and how urban pricing policies and other green zone arrangements can be effectively combined.

The section below presents the review.

⁷⁶ COM(2009) 490 final, Action Plan on Urban Mobility

5.3.1 Review

The EC launched a tender for a methodological study on the urban dimension of the internalisation of transport-related external costs. The work started in September 2011 and the final report was delivered in September 2012. The study is mostly aimed at providing a comprehensive overview of the general principles guiding the aspects of internalisation of external costs generated by all modes of transport in urban areas, along with a review of the methodologies for quantifying externalities across the Member States. Moreover, an overview of present and failed attempts of economic instruments and policy measures, based on case studies, led to the provision of conclusions and recommendations, based on best practice analyses and theory.

Amongst the wide range of instruments currently in use to influence the mobility behaviour of consumers and producers, the study focuses on pricing and charging as economic instruments for the internalisation of external costs for all modes of urban transport. Based on desk research, 12 specific case studies on urban road charging and paid parking, a questionnaire and a workshop with cities and other stakeholders, the study states that *'setting an appropriate configuration of the charge scheme (level and structure) is difficult and no 'one-size-fits' all solution seems to exist, due to local (amongst other things) geographical, historical and political circumstances'*.

With regard to the implementation and the effectiveness of road charging schemes, the analysis of the case studies showed the following:

- *The charge levels were set in a rather pragmatic way and were never explicitly based on external cost estimates.*
- *The charge level differs widely.*
- *The charging schemes do pay off and a decrease in the number of vehicles occurs.*
- *The road charging cases are generally well documented, though impacts on mobility, emissions, economy and social aspects have not always been studied.*

The following conclusions can be drawn on paid parking measures from the study:

- *Detailed evaluation studies of the impacts of paid parking are [often] lacking, Despite the lack of extensive evaluation studies, the available evaluations show that parking policy on a whole can be very effective in reducing the external costs of cars in specific areas.*

Overall, *'both for congestion charging schemes and parking pricing policies, the conclusions on estimated impacts are transferable to other situations and new schemes. However, the precise impacts also depend, to some extent, on local circumstances and the availability of alternatives for private car transport'*.

According to the methodology applied, the study concluded that *'when pricing schemes are correctly implemented, they can be successful in reducing external effects of urban mobility. When sufficiently adapted to the local circumstances, pricing schemes can prove to be self-financing and generate net revenues to the*

city. Acceptability of the scheme can be improved through good communication upfront, a clear use of the revenues and by regular feedback to the users about the monitoring results of the scheme'.

Since the Study on Urban Aspects of the Internalisation of External Costs was finalised in September 2012, most of the stakeholders did not know the achieved results when they responded to the survey of the review of the APUM.⁷⁷

POLIS, who was involved in the stakeholder meeting organised within the study, highlighted the relevance of the study itself. *'This document included interesting elements:*

- *Inclusion of parking as a means to internalise external costs;*
- *The appreciation of the urban environment with regards to the topic: the clear distinction between urban internalisation processes and the activities carried out in the framework of the revision of the Eurovignette directive. This last point is of great important for local and regional authorities'.*

ACEA pointed out that 'the study is more focused on pricing than on internalisation of external costs and that the general objective of the Action is broad and cannot be easily covered in a single study'. From the transport operators' point of view, UITP stated that 'simple restrictions for car traffic do not sufficient reflect the true negative external costs of private transport. In order to create a fair and true starting point for comparison, there should be a clear differentiation within the 'road transport' category with the use of passenger km instead of vehicle km as the basis for analysis. The aim of passenger transport is not to move vehicles but to move passengers. In urban areas, passenger km is the more relevant method of calculation'.

European Union framework for the internalisation of external costs

Among the initiatives identified to achieve the long-term objectives of the 2011 White Paper, a European Framework for the Internalisation of External Costs has been launched in March 2011. This initiative should cover both vehicles and infrastructure applications and include legal, operational, and technical issues.

⁷⁷ Among them Vienna City Administration, FEBETRA, International Road Transport Union, FIA.

5.3.2 Main findings

The box below shows the main findings of the Action on urban aspects of the internalisation of external costs.

- The EC launched a methodological study on the urban aspects of the internalisation of external costs.
- The study looked at the effectiveness and efficiency of various pricing solutions.
- When pricing schemes are correctly implemented, they can be successful in reducing external effects of urban mobility.
- When sufficiently adapted to the local circumstances, pricing schemes can prove to be self-financing and generate net revenues to the city.
- Acceptability of the scheme can be improved through good communication upfront, a clear use of the revenues and by regular feedback to the users about the monitoring results of the scheme.
- The general objective of the Commission's initiative to propose a strategy to internalise external costs generated by transport and according to the principle of 'polluter and user pays', is strongly welcomed by stakeholders.

5.4 Action 13 Information exchange on urban pricing schemes

The box below describes the action⁷⁸.

The EC will facilitate information exchange amongst experts and policymakers on urban pricing schemes in the EU. This will use input from existing initiatives⁷⁹ and include information on consultation processes, scheme design, information provision to citizens, public acceptance, operating costs and revenue, technological aspects and the impact on the environment. The conclusions will feed into the EC's work on the internalisation of external costs.

The section below presents the review.

5.4.1 Review

CURACAO Project

Between 2006-2009, within the EU co-funded project CURACAO - Coordination of Urban Road-User Charging Organisational issues – a comprehensive overview of existing urban road charging schemes across Europe was conducted; the project results have been made available to all interested stakeholders, including experts in the field and policymakers and through the project's website and dedicated publications. This project aimed to coordinate research and monitor the results of the implementation of road-user charging as a demand

⁷⁸ COM(2009) 490 final, Action Plan on Urban Mobility

⁷⁹ For example www.curacaoproject.eu.

management tool in urban areas. CURACAO reviewed the complete process of setting up a road-user charging scheme.

The project produced a very thorough presentation of the state-of-the-art urban road-pricing (URP) schemes in terms of objectives, scheme design, technology applied, business systems, predictions, traffic effects, environmental and economic impacts, equity issues, appraisal issues, acceptability issues, transferability, implementation, evaluation and monitoring. Moreover, the study identified a list of 17 Recommendations for the advancement of the application of URP schemes in Europe (12 for city and regional authorities and five for the EU).

It is stated that the EC should take the following actions:

- *Publish guidance for authorities interested in considering road user charging as a policy option;*
- *Give financial support to cities both to support studies addressing ways to reduce congestion and improve the environment and to support research and demonstration projects;*
- *Give financial support to educational campaigns, training schemes and toolkits explaining the rationale for urban road user charging as one option in the panoply of measures available to transport planners;*
- *Give financial support to research into standardisation and interoperability of road user charging systems and technologies;*
- *Bear in mind the need for governing structures which enable city authorities both to implement road user charging and the policy instruments which complement it, and to collect and use scheme revenues in accordance with policy objectives.*

Joint Expert Group on Transport and Environment

In 2009 the EC established this Joint Expert Group to explore whether EU level actions were needed in the field of urban road pricing schemes, e.g. to avoid the duplication of efforts and the creation of a 'patchwork' of local charging schemes across Europe. The Joint Expert Group on Transport and Environment brought together experts, nominated by the Member States on urban road-charging schemes and the Group delivered its final report in 2010. According to the EC aim, this report, along with the findings from CURACAO, should inform and guide future activities in the area of the internalisation of external costs for urban transport.

Based on the review of previous studies, both on successful and failing city charge projects across Europe, the report identified barriers and drivers of urban road-charging schemes. It is stated that a city charge can only produce effects in terms of transport and environmental impacts, if it is part of an integrated set of different measures, amongst these being the improvement of alternatives to car traffic in the inner city, parking space policies that are tailor-made for local requirements, transport planning measures, measures of transport management and finally possible construction of infrastructure. The key prerequisite for the introduction of a city charge is providing sufficient public support and to do that, the following is important:

- *To integrate all groups involved into the planning process at an early stage;*
- *To compensate groups particularly disadvantaged, for example with special charge rates or tax reliefs;*

- *To enable open communication and provide objective information (medial marketing);*
- *To show the public where the revenue goes to;*
- *To at least use a part of the revenue for the purpose of financing attractive alternative modes of transport.*

The main conclusions affirmed that there is only a limited role for action at European level to help facilitate local decisions on city charging.

- *Promoting harmonisation and standardisation of in-car and other technology for urban road charging;*
- *Working to facilitate a more rapid technological development at lower costs and future studies on how to enhance public support for charging systems;*
- *Ensuring the effective implementation of the framework for interoperable tolling in the European Electronic Tolling Service;*
- *Setting up, according to the Action 17 of the APUM, an 'Urban Mobility Observatory' to provide a virtual platform to share information, data and statistics, monitor developments and facilitate the exchange of best practices.*

With the participation of the interested groups, it has to be considered for each city in the individual case, whether or not and to what extent, a city charge could be an appropriate measure to be preferred to other possible alternatives, such as parking controls, in order to resolve the problems of urban traffic. And if the city charge is to be implemented, how will it take place in a package of measures designed to meet the objectives?.

TIDE Project

In October 2012 the EU funded the TIDE (Transport Innovation Deployment for Europe) project. The mission is to enhance the broad transfer and take-up of 15 innovative urban transport and mobility concepts throughout Europe and to make a visible contribution to establish them as mainstream measures. TIDE will focus on 15 innovative concepts in five thematic clusters, one of which being financing models and pricing measures.

We conclude that the EC, by establishing a Joint Expert Group on Transport and Environment and by funding and publishing projects and studies, facilitated information exchange amongst experts and policy makers on urban pricing schemes in the EU.

It is clearly stated by many stakeholders that there is no single template for charging that can be applied in all urban situations: *'schemes must be tailored to meet the needs of the specific urban context'*.

EPOMM highlighted that 'there are a number of national governments that do not support the concept of road pricing, despite its possible benefits in reducing traffic congestions in central areas. Because of this lack of general support for this concept it will be important to also address other policy options such as parking (pricing) policies and workplace parking charges. The parking policies (including pricing) are a central device of managing urban mobility and should be developed in combination with urban pricing schemes and the development of public transport'.

City networks, such as *POLIS* 'would welcome a more structured dialogue at EU level with other stakeholders to complement existing local and national processes. In terms of EU funding programmes, the exchange of good practices has been limited to *CIVITAS* where some concepts are not investigated. The FP7 project *TIDE* will be the first since *CURACAO* (2008) that will elaborate the topic'.

5.4.2 Main findings

The box below shows the main findings of the action on the information exchange on urban pricing schemes.

- The EC facilitated information exchange amongst experts and policy makers on urban pricing schemes in the EU by establishing a Joint Expert Group on Transport and Environment and by funding and publishing project and study reports.
- City networks would welcome a more structured dialogue at EU level with other stakeholders (including road operators and road transport service providers) to complement existing local and national processes.
- The Joint Expert Group reported - based on the review of previous studies, both on successful and failed city charge projects across Europe - identified barriers and drivers of urban road-charging schemes. The key prerequisite for the introduction of a city charge is providing sufficient public support and to do that, the following is important:
 - *To integrate all groups involved into the planning process at an early stage;*
 - *To compensate groups particularly disadvantaged, for example with special charge rates or tax reliefs;*
 - *To enable open communication and provide objective information (medial marketing);*
 - *To show the public where the revenue goes to;*
 - *To at least use a part of the revenue for the purpose of financing attractive alternative modes of transport.*

5.5 Main findings theme 3 (greening urban transport)

The main findings are presented in the box below.

- The EC implemented several actions with a focus on the greening of urban transport:
 - The EC continued its support for research and demonstration projects and funded new projects related to electric vehicles, including an 'electromobility' demonstration project.
 - The EC continued to develop an internet-based guide on clean and energy-efficient vehicles (the Clean Vehicle Portal). This portal facilitates EU-wide information on lifetime costs of energy consumption and emissions of pollutants of actual vehicles on the market as well as on existing procurement rules and incentive schemes for clean vehicles and market shares. It also gives access to a lifetime cost calculator.
 - The EC launched a methodological study on the urban aspects of the internalization.
 - The EC facilitated information exchange amongst experts and policy makers on urban pricing schemes in the EU by establishing a Joint Expert Group on Transport and Environment and by funding and publishing project and study reports.
- The actions can be grouped into two broad categories: encouraging the implementation and the market introduction of lower emission vehicles and alternative fuels through research and information and managing transport demand and behavioural changes through the use of economic instruments. Both categories are aimed at reducing traffic congestion in urban areas and traffic's impacts on the environment and on citizens' health.
- The general objective of the Commission's initiative to propose a strategy to internalise external costs generated by transport and according to the principle of 'polluter and user pays', is strongly welcomed by stakeholders.
- When pricing schemes are correctly implemented, they can be successful in reducing external effects of urban mobility.
- When sufficiently adapted to the local circumstances, pricing schemes can prove to be self-financing and generate net revenues to the city.
- The EC can raise awareness and obtain wide-spread take-up by activating dissemination at member states level.
- City networks would welcome a more structured dialogue at EU level with other stakeholders (including road operators and road transport service providers) to complement existing local and national processes.

6 Theme 4 Strengthening funding

This theme consists of 2 actions:

1. Optimising existing funding sources
2. Analysing the needs for future funding

This theme is responding to the main message 'strengthening funding', which emerged from the Green Paper consultation. It is directly related to the White Paper initiative of funding (37 and 38). The box below shows the description of the theme.

To reap the benefits of sustainable urban mobility, investment is often needed in infrastructure, vehicles, new technologies, improved services, etc. Most of the expense is covered by local, regional or national sources. Local sources of funding are diverse and can include local taxes, passenger transport charges, parking fees, green zone charges and urban pricing, and private funding. The growing needs for funding complex transport systems and the likely decrease in the availability of public financing are the main challenges for the future. The use of EU funding, including European Investment Bank instruments, can provide significant incentives and help leverage private funds. In the short term, the EC can help authorities and stakeholders to explore existing funding opportunities and develop innovative public-private partnership schemes⁸⁰.

6.1 Action 14 Optimising existing funding sources

The box below describes the action⁸¹.

The Structural and Cohesion Funds, with over € 8 billion allocated to clean urban transport during the current financial planning period, are a very important EU funding source for investment in infrastructure and rolling stock. Under the 'Transport theme' of FP7 there is, for the first time, a priority area dedicated to sustainable urban mobility.

A) The EC will, in addition to its ongoing activities, consider new targeted RTD and demonstration activities relevant for urban mobility.

B) The EC will maintain its support for STEER, the sub-programme under Intelligent Energy Europe⁸² which deals with the energy aspects of transport, and URBACT⁸³.

The Information & Communication Technologies Policy Support Programme can offer support to pilot projects addressing urban mobility. Finally, funding has been allocated to urban mobility actions in priority areas of the Green Paper on urban mobility, following a Call for Proposals launched in 2008.

⁸⁰ COM(2009) 490 final, Action Plan on Urban Mobility

⁸¹ COM(2009) 490 final, Action Plan on Urban Mobility

⁸² http://ec.europa.eu/energy/intelligent/index_en.html.

⁸³ <http://urbact.eu>

We present the review following the above mentioned elements A and B.

6.1.1 New targeted RTD and demonstration activities for urban mobility

This section describes the review of:

- *The EC will, in addition to its ongoing activities, consider new targeted RTD and demonstration activities relevant for urban mobility.*

The European Union has maintained its commitment to support the development and implementation of sustainable urban transport solutions through various instruments and programmes, such as the Structural and Cohesion Funds, the EU Research Framework Programme, the European Investment Bank, the IEE Programme and others. Prioritisation of investments is embedded in the mechanisms of access to such funds that, in most cases, are typical procedures for access to European public funds (for instance, calls for Proposals).

The number of major projects⁸⁴ supported by the ERDF/Cohesion fund are 30. Fourteen are in Urban transport and 16 concerning the promotion of clean urban transport for a total cost of € 6,1 billion. Budget support of € 2,8 billion is provided by EU.

7th Framework Research Programme

The Seventh Framework Programme for Research and Technological Development (FP7) bundles all research-related EU initiatives together under a common roof and plays a crucial role in reaching the goals of growth, competitiveness and employment. The central objective of transport research under FP7 is to develop safer, greener and smarter transport systems for Europe that will benefit citizens, respect the environment and increase the competitiveness of European industries within the global market.

The broad objectives of FP7 have been grouped into four categories: Cooperation, Ideas, People and Capacities. For each type of objective, there is a specific programme corresponding to the main areas of EU research policy. The EC will fund transport research by selecting project proposals that are submitted following the publication of a Call for Proposals. The Calls for Proposals under FP7 are set out in annual work programmes which provide details about the topics, timings and implementation. The amount of funds for the Transport sector was roughly € 1,2 billion in the biennium 2011-2012⁸⁵. For the first time, there is a dedicated priority area on 'Ensuring Sustainable Urban Mobility' with the following main objectives:

- Improving mobility of people and transport of goods in urban and peri-urban areas (All transport modes and all users);
- Developing clean, energy-efficient, safe and intelligent urban transport systems;
- Technological, economical, regulatory and institutional aspects;
- New and accessible public transport systems.

⁸⁴ Projects of total cost more than €50 million

⁸⁵ http://ec.europa.eu/research/fp7/index_en.cfm?pg=budget

The five research areas for ensuring sustainable Urban Mobility are:

1. New transport and mobility concepts;
2. High quality public transport;
3. Demand management;
4. Innovative strategies for clean urban transport (CIVITAS);
5. Policy support.

The number of projects with explicit reference to 'urban mobility' themes is about 5% of the overall number of projects under the 'Transport' theme,⁸⁶ however, potentially more projects could contribute to the objectives of the APUM, considering the results expected from a large number of projects that are developing new technologies related to road transport.

We conclude that the EC has, in addition to its ongoing activities, considered new targeted RTD and demonstration activities relevant for urban mobility.

6.1.2 Support for STEER

This section describes the review of:

- *The EC will maintain its support for STEER, the sub-programme under Intelligent Energy Europe⁸⁷ which deals with the energy aspects of transport, and URBACT⁸⁸.*

IEE offers a helping hand to organisations willing to improve energy sustainability. Launched in 2003 by the EC, the programme is part of a broad push to create an energy-intelligent future for us all. It supports EU energy efficiency and renewable energy policies, with a view to reaching the EU 2020 targets. This covers for instance new training schemes, promotion campaigns, or the transfer of good practices between EU countries. Carried out by public, private or non-governmental European organisations, it supports three main objectives, more energy efficiency, more renewables and better transport and mobility.

A large part of the IEE programme budget is made available through annual Calls for Proposals to support projects putting the concept of 'intelligent energy' in practice. Projects which belong to the Transport and Mobility category (STEER) have been funded for roughly € 50 million in the period between 2007 and 2011⁸⁹.

⁸⁶ Elaboration on data provided by FP7 website search engine.

⁸⁷ http://ec.europa.eu/energy/intelligent/index_en.html.

⁸⁸ <http://urbact.eu>

⁸⁹ Source: IEE performance report 2011, see also action 3 for specified funding amounts on walking and cycling projects

We conclude that the EC maintained its support for STEER.

The stakeholders' opinions are ambivalent⁹⁰. The strengthening of the urban dimension of the cohesion policy and support to integrated territorial investment measures are welcome developments. As a matter of fact, the funding schemes for projects improving urban mobility under FP7 & IEE provides important impulses in transport planning. The steps outlined in the APUM have been fulfilled. However, stakeholders point out to the EC that the amounts needed are significantly higher than those made available. According to many stakeholders, it is very difficult to obtain a good overview of the variety of funds, programmes and calls through which the EU intends to improve urban mobility and urban environments. However, the reviewers indicate that there is a dedicated section "funding" on the ELTIS website (see also action 2).

Stakeholders report the need for funding in the following primarily identified areas:

- Public transport like bus and coach infrastructures and rail infrastructures;
- Research and innovation on urban mobility, including initiatives in the Automotive sector as a way to bring cleaner, safer, smarter transport and a more competitive European industry;
- ICT for mobility;
- Possible extension of CIVITAS Programme;
- Two wheel transport (parking, infrastructure and Intermodality).

A common view is that future funding schemes could be improved by providing a central point of service for urban transport projects. In addition, the increased continuity of availability of funds and abandoning the call principle, could be a probable option in some areas.

⁹⁰ Vienna City Administration, City of Munich, consumer associations (Allgemeiner Deutscher Automobilclub ADAC e.V.,) professional associations (ACEA - European Automobile Manufacturers Association, KNV-Koninklijk Nederlands Vervoer, FNTR, International Road Transport Union, EPTO - European Passenger Transport Operators), NGO (European Cyclists' Federation, ETRA - European Two wheels Retailers Association, Baltic Energy Conservation Agency, Right to Ride Ltd), workers organization (European Transport Workers Federation), city network (Polis), authority network (EPOMM - European Platform on Mobility Management), transport operators (UITP), Academia & Research institutes (Instituto de Mobilidade e dos Transportes terrestres).

6.1.3 Main findings

The box below shows the main findings of the action on optimising existing funding sources.

- The EC has, in addition to its ongoing activities, considered new targeted RTD and demonstration activities relevant for urban mobility. There is now a dedicated priority area on 'Ensuring Sustainable Urban Mobility' within FP7.
- The EC maintained its support for STEER.
- There is a strong need for the enhancement of explicit indicators to evaluate the use of resources and results of the projects that have been financed. The improvement of these aspects could optimise the allocation of resources and identify worthy projects to be supported by more than one funding period.
- Even now there is a dedicated section on funding on the ELTIS website, several stakeholders mention that it is for them very difficult to obtain a good overview of the variety of funds, programmes and calls through which the EU intends to improve urban mobility and urban environments.

6.2 Action 15 Analysing the needs for future funding

The box below describes the action⁹¹.

A) The EC will continue to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008. It has launched a review to define the most appropriate way forward to a CIVITAS FUTURA.

B) It will also examine the future funding needs that urban mobility improvements involve as part of its overall reflection on the next multi-annual financial framework.

We present the review following the above mentioned elements A and B.

6.2.1 Support CIVITAS

This section describes the review of:

- *The EC will continue to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008. It has launched a review to define the most appropriate way forward to a CIVITAS FUTURA.*

Since 2002, the CIVITAS Initiative has helped cities to work together and test innovative technologies and new concepts for better and more sustainable urban

⁹¹ COM(2009) 490 final, Action Plan on Urban Mobility

mobility. CIVITAS has promoted an integrated approach to land-use and transport planning in urban areas to address the various transport-related challenges faced by Europe's towns and cities, such as congestion, air and noise pollution, CO₂ emissions and concerns regarding safety and security. By bringing together experts in the field of urban mobility, local decision makers and other relevant stakeholders, CIVITAS has helped build a Europe-wide urban transport community. The Initiative has made an important contribution to informing urban transport policy at both local and EU levels and is linked to many of the activities within this APUM.

Following up on the EC's announcement to continue the CIVITAS Initiative beyond the current generation, a new CIVITAS call, CIVITAS PLUS II, was launched in September 2010 and closed in April 2011. With this call, the budget committed to CIVITAS under the 7th Research Framework reached a total of €100 million, thereby, doubling the EU's financial support for CIVITAS, in comparison with the two previous EU Research Framework Programmes. CIVITAS Plus II started at the end of 2012 and will run for a period of four years.

Although the budget allocated to CIVITAS since 2002 has been €180 million, the share of the new call for CIVITAS Plus II (€18 million), is relatively low compared to the ongoing CIVITAS Plus phase (€80 million). The fourth phase of CIVITAS comprises of just 2 Collaborative Projects and 8 cities (and 1 Coordination and support action (CSA)), in comparison to 5 Collaborative Projects and 25 cities (and 2 CSA's) in CIVITAS Plus. With a lower number of funded cities under CIVITAS Plus II, the impact and attractiveness for EU cities to participate is less likely than before. At the same time, over 200 cities are currently members of the CIVITAS Forum network and have expressed their commitment through the CIVITAS Declaration. These cities are willing to learn and gain experiences towards cleaner and better urban mobility and the funding of new experiments is being regarded to stimulate activities.

The need for a continuation of CIVITAS (or programmes, such as CIVITAS that financially support 'living laboratories') was mentioned in various responses from the stakeholder survey,⁹². The positive impact of CIVITAS is considered to not only be the support for technical experiments, but also of the same importance to understand the processes through which sustainable urban mobility can be achieved (drivers and barriers).

We conclude that:

- *The EC continued to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008*
- Although the budget allocated to CIVITAS since 2002 has been €180 million, the share of the new call for CIVITAS Plus II (€18 million), is relatively low compared to the ongoing CIVITAS Plus phase (€80 million)
- The positive impact of CIVITAS is considered to not only be the support for technical experiments, but also of the same importance to understand the processes through which sustainable urban mobility can be achieved (drivers and barriers).

⁹² From e.g. Vienna City Administration, FNTR, EARPA, EPTO, UITP, ADAC, TECNALIA

- Also in action 1 (accelerating the take-up of SUMP) the possible role of CIVITAS in present and future funding needs has been positively addressed.

6.2.2 Future funding needs

This section describes the review of:

- *It will also examine the future funding needs that urban mobility improvements involve as part of its overall reflection on the next multi-annual financial framework.*

Link with multi-annual financial framework

The EC is examining future funding needs for urban mobility research and innovation, as part of the reflection on the next multi-annual financial framework.

Study on financing needs in the area of sustainable urban mobility⁹³

The EC launched a 15-month study on the short, medium and long-term funding needs of EU cities for urban transport and mobility investments and operations (see also Action 2). The results of the study were finalised in March 2012.

The study confirms that the overall costs needed for achieving sustainable urban mobility are considered to be higher than the revenues (in the mobility system), and therefore, a gap exists in the public funding of initiatives (although there is a geographical difference across the EU). Some of the existing funding programmes⁹⁴ were analysed and it was brought to light that none of these programmes were reducing costs or generating revenues sufficiently. They promote highly effective, yet risky measures, such as road pricing, large-scale deployment of alternative fuels or ranking priorities for expenditures. Lastly, there is little support at present to build up capacity amongst agencies in assessing and ranking priorities for expenditures and in particular, in making trade-offs between expensive large capital projects and smaller capital projects and maintenance expenditures.

1. In the study funding needs were identified and calculated in monetary terms. Based on a number of criteria, two options were developed that could be implemented if additional funds were to be made available by the EC: Reinforcement of one or more of the existing instruments
2. Creation of a dedicated additional EU financial instrument

The first option would add to existing instruments by focusing on improving the capacity of cities to adopt better approaches towards allocating existing funding and enhancing their procurement and asset management processes. It would help to build a more sustainable improvement in capabilities across cities receiving financial assistance through existing programmes.

The second option would involve the creation of a new financial instrument with a strategic view of how best to address the capabilities, capacities and

⁹³ Booz & Co, MOVE/B4/457-1 2010 SI2.585084, March 2012

⁹⁴ Cohesion Fund supporting TEN-T, CIVITAS Programme, JASPERS and JESSICA programme

innovation requirements of local agencies to deliver significant gains in urban mobility outcomes. The overall objectives (of a new financial instrument) would be to improve efficiencies, minimise costs and develop a holistic, integrated long-term approach to sustainable urban mobility. It would seek the widest approach in supporting cities adopting new innovative sources of funding and finance.

Booz&Co (2012) concluded that either option would mean the EU contributing towards a long-term improvement in sustainable urban mobility outcomes. However, the second option is likely to present the greatest opportunity to uplift capabilities and outcomes for European cities over the longer term. It could enable existing programmes and instruments to be integrated and could also enable cities to make better use of the existing funding and financing resources.

The conclusion that financial instruments could be further developed (and if possible, extended) is supported by a variety of respondents from the stakeholder survey, who amongst other things, pointed out that *'a specific financial instrument for achieving sustainable urban mobility is needed'⁹⁵*, *'funds should be linked to existence of planning tools / SUMP's⁹⁶*, *too little (financial) support is given for the infrastructure of alternative fuels⁹⁷*

We conclude that the EC examined the future funding needs that urban mobility improvements involve.

⁹⁵ EESC, EPOMM, ECF, VNG, etc.

⁹⁶ EESC

⁹⁷ NGVA Europe

6.2.3 Main findings

The box below shows the main findings of the action on analysing the needs for future funding.

- The EC continued to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008
- Although the budget allocated to CIVITAS since 2002 has been €180 million, the share of the new call for CIVITAS Plus II (€18 million), is relatively low compared to the ongoing CIVITAS Plus phase (€80 million)
- The positive impact of CIVITAS is considered to not only be the support for technical experiments, but also of the same importance to understand the processes through which sustainable urban mobility can be achieved (drivers and barriers).
- The EC examined the future funding needs that urban mobility improvements involve.
- The current financial frameworks have a positive impact towards cleaner and better transport in cities, however, they do not trigger the negative cost-benefit ratios or the large-scale deployment of 'risky' or controversial measures (such as road pricing, alternative fuels, etc.) enough.
- The study on financing needs proposes the creation of a new financial instrument to take a strategic view of how best to address the capabilities, capacities and innovation requirements of local agencies to deliver significant gains in urban mobility outcomes. It could enable the EU to provide a central role in realising the greatest potential gains in urban transport sustainability across economic, financial, social and environmental outcomes in the long run and provide a foundation for raising capabilities across cities in Europe.

6.3 Main findings theme 4 (strengthening funding)

The main findings are presented in the box below.

- The EC implemented several actions with a focus on the strengthening of funding:
 - The EC has, in addition to its ongoing activities, considered new targeted RTD and demonstration activities relevant for urban mobility. There is now a dedicated priority area on 'Ensuring Sustainable Urban Mobility' within FP7.
 - The EC continued to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008.
 - The EC maintained its support for STEER.
 - The EC examined the future funding needs that urban mobility improvements involve.
- The study on financing needs from BOOZ&Co (2012) proposes the creation of an additional (new) financial instrument with a strategic view of how best to address the capabilities, capacities and innovation requirements of local agencies to deliver significant gains in urban mobility outcomes. It could enable the EU to provide a central role in realising the greatest potential gains in urban transport sustainability across economic, financial, social and environmental outcomes in the long run and provide a foundation for raising capabilities across cities in Europe.
- The positive impact of CIVITAS is considered to not only be the support for technical experiments, but also of the same importance to understand the processes through which sustainable urban mobility can be achieved (drivers and barriers). Although the support for CIVITAS is strong, the share of the new call for CIVITAS Plus II (€18 million) is relatively low compared to the ongoing CIVITAS Plus phase (€80 million).
- Even now there is a dedicated section on funding on the ELTIS website, several stakeholders mention that it is for them very difficult to obtain a good overview of the variety of funds, programmes and calls through which the EU intends to improve urban mobility and urban environments.

7 Theme 5 Sharing experience and knowledge

This theme consists of 3 actions:

1. Upgrading data and statistics
2. Setting up an urban mobility observatory
3. Contributing to international dialogue and information exchange

This theme responds to the main message 'sharing experience and knowledge', which emerged from the Green Paper consultation.

The EC will help stakeholders capitalise on existing experience and support the exchange of information, in particular on model schemes developed through Community programmes. Actions at EU level can be decisive in ensuring the collection, sharing and comparison of data, statistics and information. These are currently missing but are necessary for the proper design of policies, for example on the procurement of public transport services, internalisation of external costs or integrated transport and land use planning. It also help cities with less experience. Knowledge and financial resources to capitalise on the practices developed by cities that are more advanced in the area of sustainable urban mobility, for example in areas such as pedestrian and cyclist safety where an exchange of best practice can help improve the safety of vulnerable road users in urban areas⁹⁸.

7.1 Action 16 Upgrading data and statistics

The box below describes the action⁹⁹.

To address the lack of data and statistics, the EC will launch a study on how to improve data collection for urban transport and mobility. Synergies with existing EC activities will be explored.

The section below presents the review.

7.1.1 Review

The timely availability of quality data and statistics in the field of urban mobility is a prerequisite for informed planning and policymaking, for monitoring progress towards policy targets and for evaluating the effectiveness and efficiency of policy instruments and technologies. The stakeholder consultation process which followed the publication of the EC's Green Paper on urban mobility highlighted the need for improved data and statistics in the field of urban transport. In the

⁹⁸ COM(2009) 490 final, Action Plan on Urban Mobility

⁹⁹ COM(2009) 490 final, Action Plan on Urban Mobility

APUM, the EC announced its intention to investigate the situation through a dedicated study.

At the end of 2010, the EC launched a 15-month study on data and statistics¹⁰⁰. The connection between urban transport and health (Action 3) and the issue of quality indicators (Actions 4 and 5) were addressed in the study.

The study on data and statistics explored the needs for urban statistics on several areas of urban transport and assessed the availability and quality of the data. The study identified gaps in the availability of statistics and problems in the quality within all areas of urban transport, namely:

- Limited resources for data collection
- Use of modelled data instead of measured data
- No casual link between related data, and
- Insufficient sharing of information.

The study concludes that there is a lack of availability of proper data, that harmonised methodologies are missing and that the quality of data is insufficient in many cases.

To make suggestions for improvements, synergies with existing EU programmes were taken into account by the study. Desk research, exchange of ideas with stakeholders and professional meetings were used to formulate recommendations. Recommendations for the study have been structured in a way that there are separate conclusions on data collection improvement and on synergy with other activities. The conclusions on data collection improvement include the following:

- More focus on urban dimension
- Provision of guidelines, and
- Support to further research.

The recommendations on synergy are specifically related to the EPOMM+/TEMS database, the SHANTI project and the CARE database

In relation to sustainable urban mobility plans, the study concluded that cities have difficulties linking the SUMP process with the data. However, it is still premature to suggest specific data and indicators for sustainable urban mobility plans; a further elaboration is needed here. A recommendation for ensuring good quality in developing sustainable urban mobility plans is the use of a logic similar to that of the EFQM (European Foundation for Quality Management) model.

Stakeholders' reactions are, in most cases, in line with conclusions that have also been drawn within the study:

- *'Definitions must be made at European level, that the data necessary for good transport planning is accessible for public authorities for free or at a reasonable price. Monopolies on information by private institutions harm innovation and thus the economic development, and finally have negative consequences if planning decisions are not taken based on the best possible information' (City of Vienna)*

¹⁰⁰ Draft final report, version April 4 2012

- *'Promoting the use of common frameworks (such as urban transport accounts) for the collection and comparison of urban transport data' (UITP)*
- *'EPOMM would encourage the EC to make more systematic and effective use of information already available within networks, platforms (for example EPOMM and ELTIS websites with case study database) and projects because the EU has an important role to play in collecting, coordinating and transferring best practices over Europe'*
- *'A lot of data related to walking and cycling is collected but it's spread-out, dispersed and unsystematic. The core of the problem is the lack of a uniform methodology. Hence, there is a need to standardise the methodology. This accounts for the collection, analyzing and comparison of the data, on a permanent basis. Furthermore, the problem of lack of frequency collecting data on walking and cycling should be overcome by making recommendations on the frequency of data collection'. (European Cyclists Federation)*
- *'In general, electric and sometimes arbitrary mix of statistical sources is used in the urban transport debate. Some of this lack of authentication and their use adds little to the credibility of the discussions. Some of them may give a misleading picture. Some of the existing sources give data from only a small number of Member States, which may not be representative of the EU as a whole or should not be extrapolated to the entire Union. At EU level there should be a possibility to facilitate action to collect in a harmonised way the information that is needed for further development of EU urban transport policies. The EC needs to look at these issues first'. (ACEA, European Automobile Manufacturers Association)*
- *'Contact stakeholders and the main industry associations and ask for a closer collaboration and support to provide information. For example, NGVA Europe has approached the Eltis portal and normally the Eltis portal should take up the initiative themselves'.(NVGA)*
- *A reaction from the European Workers Organisations argued that 'it is necessary to include the interest of the employers in collecting data on urban transport'. 'More should be done with present available data' (Koninklijk Nederlands Vervoer KNV).*

POLIS states that 'This action, and the study which results from its implementation, should be highly promoted as it addresses a very important topic on which the European added value is clear. To comment on some specific aspects of this action:

- *It is important that it supports the evolution towards the definition of urban road safety data collection which is asked for by several local authorities to support their work in improving road safety.*
- *Modal share data collection definition and monitoring should benefit from this action.*
- *Synergies with EPOMM modal share database should be explored'.*

We conclude that the study's conclusion for further research seems appropriate and take-up of this action is clearly needed.

7.1.2 Main findings

The box below shows the main findings of the action on upgrading data and statistics.

- The EC has launched a study on data and statistics with regard to urban mobility, which addressed the lack of data and statistics in this field.
- The draft study report (The study has not been finalised yet) shows that there are many problems and gaps in urban transport statistics.
- The recommendations from the study on data collection improvement include:
 - providing guidelines for use of common concepts
 - providing financial incentives for the making of urban travel surveys
 - more synergy with other projects
 - focusing on the urban dimension while modelling energy and emission, and
 - supporting further quantitative research on the relation between physical activity and health as well between pollution and health.
- The suggestions of the respondents on the survey and on the implementation of the APUM are generally in line with the recommendations of the study. Also stakeholders expressed difficulties and problems in achieving proper and harmonised urban transport statistics.

7.2 Action 17 Setting up an urban mobility observatory

The box below describes the action¹⁰¹.

The EC will set up an urban mobility observatory for urban transport practitioners in the form of a virtual platform¹⁰² to share information, data and statistics, monitor developments and facilitate the exchange of best practices. The platform will include a database with information on the wide range of tested solutions already in place, training and educational material, staff exchange programmes, and other support tools. It will also provide an overview of EU legislation and financial instruments relevant to urban mobility.

The section below presents the review.

7.2.1 Review

Website

The action of setting up an urban mobility observatory was launched in May 2010 as part of the ELTISPlus. This three-year project presented the ELTIS website¹⁰³ in a revised and updated format and significantly expand its offering. The updated website was launched as the virtual platform of the urban mobility

¹⁰¹ COM(2009) 490 final, Action Plan on Urban Mobility

¹⁰² Building on existing initiatives, for example www.eltis.org.

¹⁰³ <http://www.eltis.org/>

observatory in March 2011. The website provides information on urban mobility and includes an improved news service, a monthly newsletter, a new image library and video section, as well as sections for events, training and job opportunities, a policy round-up and funding information.

The revised website www.eltis.org has been in operation since 2011. Due to the revision, the website now contains the functionality as intended in this action. Its main menu shows the items news, case studies, videos, events, tools, services and friends. One feature is the access to extensive statistical information. Access is given as an item under the following services:

- Statistics at country level
- Statistics at city level

The forum is working under the heading of 'Friends' and links have been established with several websites of stakeholders and related programmes and include the clean urban transport platform website (see Action 11).

The ELTIS website had around 150.000 hits a month before the launch of the new mobility observatory. The hits raised to about 250.000 a month after the launch of the observatory in 2011. The hits continuously raised to nearly 400.000 hits in February 2013.

New marketing plan

The development of a new marketing plan is also under way and will promote ELTIS as the urban mobility portal for professionals with an interest in this sector. The aim is to increase the use of ELTIS threefold by 2013. The marketing plan, as mentioned in the action, is either not ready or not publicly available. Given the low awareness under stakeholders, a marketing plan is useful.

Several stakeholders ask for a take-up of the action for the following:

- *'Assuring continuity of the European mobility observatory'. (City of Vienna)*
- *'This action has been well accomplished. Continue by making the public more aware of it, please.' (European Cyclist Federation)*
- *'Integration of the results of action 16 will be a decisive step forward towards the establishment of a European mobility observatory'.(Polis)*
- *'a key Action of the APUM''that should collect information across Europe on mobility and transport, not only cases and good practices, but statistics and data' (Instituto de Movilidad »e e dos Tranportes terrestres)*
- *'EPOMM recommends connecting experience of similar existing platforms such as EPOMM and Allinx, two virtual platforms for the exchange of best practices and information on mobility management. The EC could also stimulate the development of national and/or regional urban observatories by national authorities, in line with the principle of subsidiarity, which would monitor mobility measures and feed directly into the European Urban Mobility Observatory. As a comment to this reaction the question could be raised whether or not several platforms complicate the structure: one platform may be easier to promote and easier to access.*

7.2.2 Main findings

The box below shows the main findings of the action on setting up an urban mobility observatory.

- The EC has set up an urban mobility observatory in the form of a virtual platform (website).
- The platform includes a database with information on the wide range of tested solutions already in place, training and educational material, staff exchange programmes, and other support tools. It also provides an overview of EU legislation and financial instruments relevant to urban mobility.
- The objective of the website fits the need.
- The overall awareness of the website still remains low and should be expanded by the announced marketing plan.
- The potential of the website is much greater than its present use. Some links with other Actions are missing. As an example, there is at present no direct link from the website on clean vehicles in Action 11 to the ELTIS website.
- Links to national initiatives could expand the functionality and use of the site.

7.3 Action 18 Contributing to international dialogue and information exchange

The box below describes the action¹⁰⁴.

Local and regional authorities across the world are confronted with similar mobility challenges. Tackling climate change, facilitating international trade, addressing the security of energy supplies, securing seamless transport flows and ensuring social equity are issues of global relevance.

Using existing platforms and financial mechanisms, the EC will facilitate dialogue, city-twinning, and information exchange on urban mobility with neighbouring regions and global partners.

As a first step, the EC will open the CIVITAS Forum network to cities from the Eastern neighbourhood, Mediterranean and African regions¹⁰⁵.

For the longer term, the EC will include this dimension in the development of CIVITAS FUTURA and consider further dedicated activities under FP7.

The section below presents the review.

7.3.1 Review

As announced in the APUM, the CIVITAS Forum network of cities has been opened to neighbouring regions. At programme level, the EC is maintaining its contacts with relevant initiatives outside Europe, such as the EUROMED

¹⁰⁴ COM(2009) 490 final, Action Plan on Urban Mobility

¹⁰⁵ COM(2009) 301.

partnership, the EU/China Partnership for Urbanisation, the Clean Cities Programme in the USA and the Clean Air Initiative in Latin American Cities.

A dedicated international workshop was organised within the framework of the CIVITAS Forum conference in 2009 to explore possible areas for a more in-depth and international cooperation.

CIVITAS Plus II, which started at the end of 2012, should establish a Coordination Support Action which will help to create a more in-depth international cooperation by for instance, including cities with recognised expertise in relevant areas in the CIVITAS Thematic Groups.

Under the EC High Level Dialogue on Innovation, international cooperation with several countries is highlighted and in particular, cooperation in the field of urban transport.

Research and demonstration activities have been implemented through several FP7 projects with International Cooperation Partner Countries, such as China, India, Brazil and South Africa. In particular, during FP7, two SICA projects (Specific International Cooperation Action) were funded in the field of intermodal information systems (VIAJEO) and large-event mobility management (STADIUM).

In July 2012, a new Call was launched under FP7 for the exchange of knowledge and experiences on transport solutions in the EU and beyond. There are many initiatives and projects, funded by the EC, that stimulate international dialogue on (urban) mobility, with CIVITAS being one of them:

- In 2012, around 15 of the over 200 CIVITAS Forum network cities came from non-EU countries, such as Albania, Serbia or Turkey. Four cities were demonstration cities from these non-EU countries (Skopje – Macedonia, Koprivnica and Zagreb – Croatia and Tel Aviv – Israel).
- The opening of the CIVITAS initiative to neighbouring regions (Eastern neighbourhood, Mediterranean and African regions through EUROMED) is a good example of the EC's aim to contribute to an international dialogue and information exchange within and outside Europe.
- At the latest TRA in Athens (April 2012) there was a special session on CIVITAS for the sharing of knowledge on urban mobility with the participants.
- CIVITAS also maintains contact with relevant initiatives outside of Europe, such as the Clean Cities Programme in the USA and for example, representatives of the Clean Air Initiative for Latin American Cities participate in each other's conferences and provide key note speeches. In addition, representatives from CIVITAS present the initiative at international conferences, such as the TRB or ITS world congress. The CIVITAS initiative shared its knowledge with China and other Asian countries at the Shanghai Expo in 2010, where a workshop was organised.
- CIVITAS WIKI, the support action of CIVITAS Plus II (which started at the end of 2012) aims to bring the knowledge of CIVITAS from the past ten years together. WIKI will also help in creating an in-depth international cooperation by for example, including cities with recognised expertise in relevant areas within the CIVITAS Thematic Groups.

- Recently the EC announced a new CIVITAS call with a similar topic: capitalising CIVITAS knowledge and experience.
- Additional EC activities to support the sharing of experience and knowledge are the ELTIS and EPOMM databases. These databases on urban mobility are available online to support stakeholders in finding information on relevant data and statistics.
- In 2013 and as part of the FP7 Transport Call, two Coordination and Support Actions will start on 'Implementing innovative and green urban transport solutions in Europe and beyond'. The aim is twofold: 1) the take-up of innovative and green urban transport solutions and recommendations for future cooperation between European cities and cities across the world and in particular, from Latin American Countries, China and Singapore; 2) to share experiences from topics of common interest and propose innovative and green urban transport solutions for cities from Mediterranean partner countries.

STA points out 'A great need to enhance the dialogue and information exchange, to get best practise and for benchmarking in the urban access area'. In addition, EARPA states that 'The CIVITAS Forum is a strong network (brand) that offers good opportunities for strengthening cooperation and knowledge exchange within Europe and beyond'. The stakeholders support the idea to continue and, if possible strengthen, the international dialogue, also because of 'absence of any (substantial) legal initiatives in the field of urban mobility (FEBETRA)'.

We conclude that:

- International dialogue and information exchange beyond the EU gets growing attention and several instruments are used to organise this dialogue.
- The CIVITAS initiative has been extended to other regions and there are now contacts with relevant initiatives outside Europe.

7.3.2 Main findings

The box below shows the main findings of the action on contributing to international dialogue and information exchange.

- The EC facilitated dialogue, city-twinning, and information exchange on urban mobility with neighbouring regions and global partners, using existing platforms and financial mechanisms. As a first step, the EC opened the CIVITAS Forum network to cities from the Eastern neighbourhood, Mediterranean and African regions.
- Although not many stakeholders are aware of the action, the EC supports the international dialogue and information exchange on urban mobility through various means.
- The CIVITAS Initiative seems to be an appropriate instrument for international dialogue, given the multiple activities for information exchange with surrounding European regions and other continents in the world. As other regions in the world are under rapid development (e.g. many countries in Asia and Latin America), there seems to be a tendency towards a two-way exchange of knowledge and experiences.

7.4 Main findings theme 5 (sharing experience and knowledge)

The main findings are presented in the box below.

- The EC implemented several actions with a focus on sharing experience and knowledge:
 - The EC launched a study on data and statistics with regard to urban mobility, which addressed the lack of data and statistics in this field. The draft study report (the study has not been finalised yet) shows that there are many problems and gaps in urban transport statistics. Take up of this action is needed.
 - The EC set up an urban mobility observatory which already contains a great amount of relevant data and communication tools. However, the potential use is higher than the present use.
 - The EC facilitated dialogue, city-twinning, and information exchange on urban mobility with neighbouring regions and global partners, using existing platforms and financial mechanisms.
- The CIVITAS Initiative seems to be an appropriate instrument for international dialogue, given the multiple activities for information exchange with surrounding European regions and other continents in the world.

8 Theme 6 Optimising Urban Mobility

This theme consists of two actions:

1. Urban freight transport
2. Intelligent transport systems (ITS) for urban mobility

This theme responds to the main message 'optimising urban mobility', which emerged from the Green Paper consultation. The box below shows the description of the theme.

Effective integration, interoperability and interconnection between different transport networks are key features of an efficient transport system. This can facilitate modal shift towards more environmentally friendly modes of transport and efficient freight logistics. Affordable and family-friendly public transport solutions are key to encourage citizens to become less car-dependent, use public transport, walk and cycle more, and explore new forms of mobility, for example in the form of car-sharing, carpooling and bike-sharing. Alternative means of transport such as electric bicycles, scooters and motorbikes as well as taxis can also play a role. Company mobility management can influence travel behaviour by drawing the employee's attention towards sustainable transport options. Employers and public administrations can provide support through financial incentives and parking regulations¹⁰⁶.

8.1 Action 19 Urban freight transport

The box below shows the action¹⁰⁷.

- A) The EC intends to provide help on how to optimise urban logistics efficiency, including on improving the links between long-distance, inter-urban and urban freight transport, aiming to ensure efficient 'last mile' delivery. It will focus on how to better incorporate freight transport in local policies and plans and how to better manage and monitor transport flows.*
- B) As part of its preparations, the EC will organise a conference on urban freight transport in 2010. At the conference, the implementation of the urban initiatives in the Freight Logistics Action Plan¹⁰⁸ will also be assessed.*

In the following subsections we will present the review following the above mentioned elements A and B.

¹⁰⁶ COM(2009) 490 final, Action Plan on Urban Mobility

¹⁰⁷ COM(2009) 490 final, Action Plan on Urban Mobility

¹⁰⁸ COM(2007) 607.

8.1.1 Support to the optimisation of urban logistics and last mile delivery

This section describes the review of:

- *The EC intends to provide help on how to optimise urban logistics efficiency, including on improving the links between long-distance, inter-urban and urban freight transport, aiming to ensure efficient 'last mile' delivery. It will focus on how to better incorporate freight transport in local policies and plans and how to better manage and monitor transport flows.*

The EC has supported the optimisation of urban freight logistics mainly through launching a dedicated study and by funding various urban freight projects (through STEER).

Study on Urban Freight Transport and Logistics

The EC launched a 15-month study on urban freight transport and logistics in December 2010 with the final report being submitted in April 2012. The study provided a comprehensive review of existing and planned practices and measures relating to the urban section of the freight transport chain across Member States of the EU. The study also explored whether action at European level should be envisaged to promote successful solutions and improve the performance of urban freight transport.

The study has reviewed a large set of measures and practices that have been employed to make urban freight transport more efficient and sustainable. Individual measures have been implemented as part of a mix:

- Regulatory (time windows, vehicle weight and size restrictions, low emission zones)
- Market-based (internalisation of external costs)
- Land use planning (parking space, logistic zones, safeguard sites)
- Infrastructure (network of on-street loading and unloading bays, rail-connected logistic zones)
- Technologies (ICT/ITS applications)
- Management (Urban logistic plans – SUMP)

Based on an assessment of the economic and environmental impacts of measures and the potential to apply these across Europe, policy recommendations include:

- Urban freight transport plans should be part of sustainable urban transport plans (a high quality plan should be a prerequisite for the receipt of funding),
- Disseminate guidelines by means of a single and already established website that showcases best practices,
- Promote development of sustainable UFT (annual award scheme, priority within Marco Polo)

STEER urban freight projects

For the period 2009 - 2012, the following STEER projects related to urban freight were selected for co-funding:

- TRAILBLAZER (IEE/09/802) focusing on delivery servicing plans;
- C-Liege (IEE/10/154) focussing on the development of local freight development plans;

- Cyclelogistics (IEE/10/277) looking to promote the use of cargo bikes in urban freight transport (private and public);
- ENCLOSE (IEE/11/826) focusing on the development of sustainable urban logistic plans for small and medium-sized towns;
- SMARTSET (IEE/12/714) aiming to develop knowledge and practical showcases on how terminal schemes can be made efficient.

We conclude that the EC has initiated studies and projects that enhance the efficiency of urban freight transport. It appears that the focus was on best practices and applications in urban areas, rather than the link with long-distance transport. The study addressed the issue of freight transport and urban mobility plans and recommended improved integration with sustainable planning (see also Action 1). One of the stakeholders (VNG) also emphasized this element. The Dutch VNG (organisation of Dutch municipalities) states that *'urban supply of freight remains a bottleneck when it comes to safety and air quality issues. Reflecting together and exchange ideas is therefore very much supported. VNG also indicates that the EC has an important role to encourage solutions at a European level, together with the Member States'. 'to be taken further by the EC is the integration of passenger and freight transport and the importance of both elements in sustainable transport planning. Important question then is how this should be done. Polis focuses on the coordination between businesses, freight operators and public authorities to promote the integration of freight delivery plans with travel plans. Freight initiatives should also be strengthened in the Civitas programme (POLIS)'*.

8.1.2 The Conference on urban freight and logistics

This section describes the review of:

- *the EC will organise a conference on urban freight transport in 2010. At the conference, the implementation of the urban initiatives in the Freight Logistics Action Plan will also be assessed.*

The EC, together with the Belgian Presidency of the EU, organised a conference on urban freight transport and logistics¹⁰⁹ (in November 2010). The conference brought together representatives from the European institutions and from the key stakeholder associations, to debate on sustainable solutions for urban freight transport and logistics in European cities. This facilitated the discussion on sustainable urban freight transport and the assessment of the urban initiatives in the Freight Logistics Action Plan.

We conclude that the conference on urban freight and logistics:

- Facilitated the discussion on sustainable urban freight transport. It brought together high-level representatives from the European institutions and from key stakeholders and organisations to debate on sustainable solutions for urban freight transport and logistics. The conference was structured to cover several key aspects of urban freight transport and logistics, which were discussed in six

¹⁰⁹

http://ec.europa.eu/transport/themes/urban/events/2010_11_16_urban_freight_en.htm

thematic workshops (connecting the city and the hinterland, consolidation centres, urban planning and freight distribution plans, last mile delivery, managing freight movements in the city, and clean vehicles for urban freight transport).

- Assessed the implementation of urban initiatives.

Findings from the conference were:

- Knowledge has to be sufficient at local level in order to reach goals.
- Awareness has to be sufficient: co-operation, dialogue, best practice dissemination. Relevant organisations need to be reached, to avoid actions for the in-crowd and to prevent goals from not being reached.
- Importance of finding accurate information and data / statistics.
- Need for guidelines (related to White Paper Initiative 33 (urban logistics)).
- Need to involve all stakeholders.
- Need for economically sustainable solutions.
- Innovation and incentives: the entire framework is important (including the vehicle). There is a need to change long-term traditions and practices of urban planning in order to realise new models of urban planning and city logistics¹¹⁰.

Further dissemination continues through existing programmes, such as CIVITAS, where cities deal with freight transportation (for instance, Bath implements a freight consolidation centre in the current CIVITAS Plus programme and disseminates results at different exhibitions such as the Civitas Forum).

IRU has actively participated in the conference on urban freight logistics and indicated that *'this has been a very useful and interesting start'*. Also the *EPOMM* and *POLIS* concluded that *'the conference has been a success'*. *'However, the follow-up could be improved and results have not been very concrete until now'* (*ACEA*). Results from the study were not available to most of the respondents at the time that the survey was conducted.

¹¹⁰ (http://ec.europa.eu/transport/urban/events/2010_11_16_urban_freight_en.htm).

8.1.3 Main findings

The box below shows the main findings of the action on urban freight transport.

- ¶ The EC helped to provide on how to optimise urban logistics efficiency by funding projects and launching and publishing a study.
- The EC organised a conference on urban freight transport.
 - At the conference the implementation of urban initiatives have been assessed.
 - The study on urban freight transport and logistics concluded and recommended a.o.:
 - Urban freight transport plans should be part of sustainable urban transport plans (a high quality plan should be a prerequisite for the receipt of funding).
 - Disseminate guidelines by means of a single and already established website that showcases best practices.
 - Promote development of sustainable UFT (annual award scheme, priority within Marco Polo).
 - The study results are in line with the responses of the stakeholders on the consultation and implementation of the APUM.
 - To be taken further by the EC is the integration of passenger and freight transport and the importance of both elements in sustainable transport planning.

8.2 Action 20 Intelligent Transport Systems (ITS) for urban mobility

The box below shows the action¹¹¹.

- A) *The EC envisages offering assistance on ITS applications for urban mobility to complement the ITS Action Plan¹¹². It will look at, for example, electronic ticketing and payment, traffic management, travel information, access regulation and demand management, and address the opportunities opened up by the European Galileo GNSS system.*
- B) *As a start, the EC will launch a study on improving the interoperability of ticketing and payment systems across services and transport modes, including the use of smart cards in urban transport with a focus on major European destinations (airports, rail stations).*

In the following subsections we will present the review following the above mentioned elements A and B.

¹¹¹ COM(2009) 490 final, Action Plan on Urban Mobility

¹¹² COM(2008) 886.

8.2.1 Assistance on ITS applications for urban mobility

This section describes the review of:

- *The EC envisages offering assistance on ITS applications for urban mobility to complement the ITS Action Plan¹¹³. It will look at, for example, electronic ticketing and payment, traffic management, travel information, access regulation and demand management, and address the opportunities opened up by the European Galileo GNSS system.*

The assistance has been guided by an expert group on Urban ITS. After consultations with stakeholder associations and following up on a dedicated workshop in March 2010, a new Expert Group on Urban ITS was established. It draws on the experience of local stakeholders who are responsible for the deployment of ITS in urban areas, both for road and public transport. The topics of interest for the group are travel information, traffic management and urban logistics and smart ticketing. The first meeting took place on the 8th of December 2010. The outcome of its two-year mandate are guidelines for deployment and a best practice manual. The project was supported under the framework contract of the ITS Action Plan.

The **Expert Group on Urban ITS**¹¹⁴ was established by the EC in December 2010 under the framework contract of the **ITS Action Plan** (2008)¹¹⁵. The expert group draws on the experience of local stakeholders who are responsible for the deployment of ITS in urban areas, both for road and public transport (in total 25 experts). The topics of interest for this group are:

- Travel information
- Traffic management and urban logistics, and
- Smart ticketing.

The group has a two-year mandate. The outcomes are:

- A best practices manual for the applications of urban ITS,
- Guidelines for deployment, and
- Identification of the needs for further standardisation on a European level.

Guidelines are available for 'Multimodal Information', 'Traffic Management and Urban Logistics' and 'Smart Ticketing'. These guidelines identify stakeholders, impacts of ITS and key factors/recommendations for successful deployment. The guidelines were commented on by the stakeholders and the final guidelines were published on the EC's website in January 2013.

Not all respondents to the questionnaire agree that the action has already produced all its results (questionnaire was launched in July 2012). Within the public consultation, some respondents (amongst which *AIT*, *POLIS*, *EPOMM*, *UITP*) maintained that cities were insufficiently represented in the Urban ITS Expert Group.

¹¹³ COM(2008) 886.

¹¹⁴

<http://ec.europa.eu/transparency/regexpert/detailGroup.cfm?groupID=2520&lang=EN>

¹¹⁵ http://ec.europa.eu/transport/its/road/action_plan/action_plan_en.htm

The *Vienna City Administration* mentioned that *'The work by the Urban ITS Expert Group produced important results. The studies on travel information and smart ticketing are available. Other subjects were treated less prominently, for instance ITS for traffic management or demand management'*.

POLIS suggested *'The creation of the urban mobility ITS experts group was a useful step. The impact of the group will depend on the final quality of its guidelines and how they will be used'*

As part of the 2013 FP7 Transport Call for Proposals (launched in July 2012), an important topic on 'Managing an integrated multimodal urban transport network', has been launched and will support the work of the Urban ITS expert group. The aim of this project is to develop, demonstrate and validate strategies and tools which contribute to integrated multimodal network management for cities and their hinterland. An integrated approach will be developed focusing on 4 innovation areas: data creation and use, open ITS systems, decision support tools, new mobility information services (passengers and freight). Demonstrations will be given in different pilot cities across Europe.

8.2.2 Study on Public Transport Smartcards

This section describes the review of:

- *the EC will launch a study on improving the interoperability of ticketing and payment systems across services and transport modes, including the use of smart cards in urban transport with a focus on major European destinations (airports, rail stations).*

The Final Report of the '**Study on Public Transport Smartcards**' (May 2011)¹¹⁶ (a study undertaken on behalf of the EC by the EC Smartcards Study consortium) presents recommendations for actions to be taken by the EC. It encourages and supports interoperability between smart ticketing systems, while reducing barriers in the use of public transport.

Smart cards are regarded as positive in terms of a faster transaction of payment and less fraudulent ticket usage. In addition, they enable a more comfortable usage across (public) transport modes by travellers. Challenges for future developments are:

- Cross-border usage of smart cards should be possible through better interoperability of technologies
- Use of (flow) data generated by the travellers can be used to improve the operational efficiency.
- Use of smart cards for other services should be possible, but caution is needed to avoid the (legal, economical and operational) risks of a 'One Card for All' application.
- There are legal issues to tackle, amongst which, payment transactions (e-money) and privacy.

¹¹⁶ http://ec.europa.eu/transport/urban/studies/urban_en.htm

The study on public transport smart cards concluded that the EC should lead the further integration of smart card systems across Europe, as market parties cannot fully solve the issues of interoperability by themselves. Efforts should be made to develop not only technical standards, but also implementation and operational examples through a 'model scheme'. The study considered a vision and action plan necessary to enable further development with continuing engagement of the EC with those designing, implementing and operating the schemes.

8.2.3 Main findings

The box below shows the main findings of the action on ITS for urban mobility.

- The EC offered assistance on ITS applications by launching an ITS expert group and by launching as part of the 2013 FP7 Transport Call for Proposals an important topic on 'Managing an integrated multimodal urban transport network', which will support the work of the Urban ITS expert group.
- The EC launched a study on Study on improving the interoperability of ticketing and payment systems across services and transport modes (Study on Public Transport Smartcards).
- The study on Public Transport Smartcards states:
 - The EC should lead the further integration of smart card systems across Europe, as market parties cannot fully solve the issues of interoperability by themselves.
 - The EC should make efforts to develop not only technical standards, but also implementation and operation examples through a 'model scheme'.
 - A vision and action plan is considered necessary to enable further development with continuing engagement of the EC with those designing, implementing and operating the schemes
- The Expert Group on ITS produced a best practice manual for the applications of urban ITS, guidelines for deployment and an identification of the needs for further standardisation on a European level. Within the public consultation, some respondents maintained that cities were insufficiently represented in the Urban ITS Expert Group.

8.3 Main findings theme 6 (optimising urban mobility)

The main findings are presented in the box below.

- The EC implemented several actions with a focus on optimising urban mobility:
 - The EC helped to provide on how to optimise urban logistics efficiency by funding projects and launching and publishing a study.
 - The EC organised a conference on urban freight transport.
 - At the conference the implementation of urban initiatives have been assessed.
 - The EC offered assistance on ITS applications by launching an ITS expert group and by launching as part of the 2013 FP7 Transport Call for Proposals an important topic on 'Managing an integrated multimodal urban transport network', which will support the work of the Urban ITS expert group.
 - The EC launched a study on Study on improving the interoperability of ticketing and payment systems across services and transport modes (Study on Public Transport Smartcards).
- To be taken further by the EC is the integration of passenger and freight transport and the importance of both elements in sustainable transport planning.
- The creation of the Urban ITS Expert Group is recognised as a useful step, even if different stakeholders have different points of view.
- The study on Public Transport Smartcards states:
 - The EC should lead the further integration of smart card systems across Europe, as market parties cannot fully solve the issues of interoperability by themselves.
 - The EC should make efforts to develop not only technical standards, but also implementation and operation examples through a 'model scheme'.
 - A vision and action plan is considered necessary to enable further development with continuing engagement of the EC with those designing, implementing and operating the schemes.
- The study on urban freight transport and logistics concluded and recommended a.o.:
 - Urban freight transport plans should be part of sustainable urban transport plans (a high quality plan should be a prerequisite for the receipt of funding).
 - Disseminate guidelines by means of a single and already established website that showcases best practices.
 - Promote development of sustainable UFT (annual award scheme, priority within Marco Polo).
- A key point is improving the collection and availability of comparable, relevant, and timely data for each mode of transport and mobility service.
- There is a need to foster cooperation amongst car manufacturers, navigation services providers and public transport operators to develop new services that address both user needs (e.g. continuity of service) and public authorities objectives (e.g. modal shift towards more sustainable modes of transport).
- Public authorities are aware that they should control goods transport activities, however, most of them do not know how; the resulting approach undertaken by many local administrators is to provide short-term solutions to emergency situations.

9 Main findings and recommendations

This chapter presents:

- A summary of the main findings on what has been achieved with regards to the 20 Actions of the APUM (looking back);
- Overall findings;
- Recommendations for possible EU action (looking ahead).

9.1 Main findings per action

Summary of main findings

Action 1 Accelerating the take-up of sustainable urban mobility plans

- The EC provided guidance material, promoted best practice exchange and supported educational activities for urban mobility professionals. Through these activities the action has been implemented and local authorities are being supported in developing sustainable urban mobility plans.
- However, freight transport in sustainable urban mobility has not yet been fully addressed.
- The encouragement of Member States to provide platforms that would foster the development of sustainable urban mobility policies has not been (fully) reached. The EC has carried out useful actions, however, it has been difficult to obtain widespread take-up because necessary "multiplication and dissemination" at Member State level has not taken place.
- An urban mobility dimension in the Covenant of Mayors has been introduced.
- The incorporation of transport and mobility issues in the Sustainable Energy Action Plans is only found in some cases.
- Some stakeholders support the linking of regional development and cohesion funds to cities and regions that have submitted a current and independently validated Urban Mobility Performance and Sustainability Audit Certificate. This might accelerate the take-up of sustainable urban mobility plans.
- Via the ELTIS PLUS project a working definition of a SUMP has been provided. As of yet however, there is no official EU document with a definition of a SUMP.

Action 2 Sustainable urban mobility and regional policy

- Comprehensive information on the link between sustainable urban mobility measures and regional policy objectives has not been found. The website mobility plans gives information about possible benefits, which might be seen as a link between sustainable urban mobility measures and possible regional policy objectives of the Member States. This information is not found on the ELTIS website, which we consider as the Mobility Portal. The ELTIS website offers, however, a dedicated service to EU Funding and to EU legislation and policy, including State Aid.
- The wider framework for sustainable urban development, as well as the link between urban transport and the Trans-European transport network has been addressed.
- An important element in addressing the wider framework for sustainable urban development is the link between funding and SUMP's.
- Funding opportunities have been listed in a handbook by DG REGIO, as well as on the ELTIS website.
- The ELTIS website also offers a dedicated service to State Aid.

Action 3 Transport for healthy urban environments

- The support to develop partnerships towards healthy urban environments has been implemented via the European Mobility week and STEER projects.
- It is not apparent whether an in-depth exploration of further synergies between public health and transport policy has taken place.
- Nevertheless, the publication of the recent FP7-HEALTH-2013-INNOVATION Call which addresses issues of integrating health concerns in transportation and urban planning, has been embraced as a first step in the further synergies between public health and transport policy.
- The outreach of the European Mobility week is broad. The main reason for this might be that there are clear national dissemination channels.

Action 4 Platform on passenger rights in urban public transport

- By creating a platform meeting with stakeholders the EC moderated a dialogue with stakeholders, including organisations representing operators, authorities, employees and user groups.
- There is a conflict of opinions between user organisations and public transport operators and authorities for the creation of a Permanent Platform on passenger rights with related urban transport issues. The aim to put – building on sectoral initiatives and complementing the EC’s regulatory approach - a set of voluntary commitments in place has not been achieved.
- According to the transport operators, many voluntary initiatives in this sector are in place, so an intervention from the EC is not considered necessary. Moreover, in times of budgetary constraints, any additional commitments, even on a voluntary basis, can add costs for the transport operators.
- With regards to possible legal obligations on passenger rights in urban public transport, transport operators, authorities and city organisations agreed that the EC should wait for the full implementation of Regulation (EU) No181/2011 on passenger rights in transport before adopting a new legislative proposal.
- Some user organisations see the need for further action now, such as a charter, a portal or the establishment of a permanent platform for the exchange of best practices on passenger rights and for identification of gaps, quality indicators and possible future legislation. The user organisations, which support the idea of a permanent platform, stressed the importance of the platform being a place to exchange best practices on the protection of passenger rights, to identify gaps in this area and to promote raising awareness and communication with passengers.

Action 5 Improving accessibility for persons with reduced mobility

- The EC included the urban mobility dimension in the EU Disability Strategy 2010-2020, as well as in its accompanying working document.
- The EC funded projects are aimed at developing quality indicators and reporting mechanisms and the specific issue of quality indicators is addressed in action 16.
- The appropriateness of indicators and reporting mechanisms should be based on evaluations, as well as on stakeholder involvement in accessibility interventions.
- The conflict of opinions between user organisations and public transport operators, as described in action 4, is also valid for action 5 (as accessibility is one of the elements of passenger rights). Operators state that “there is a limit to what operators can reasonably do without adversely affecting the majority of users in terms of space and fare costs”.
- There is a clear link between health, safety, accessibility, attractiveness and urban mobility (policies), including links between policy programmes such as FP7, WHO Age Friendly Cities programmes and programmes with initiatives from organisations, such as FIA (<http://www.fiadisabledtravellers.com>).
- To obtain widespread take-up “multiplication and dissemination” via several channels,

including at Member States level, is necessary. For example: preparations with regards to the entry into force of the bus and coach passenger rights regulation did not reach decentralised authorities at the moment of the survey.

Action 6 Improving travel information

- The EC launched the Smart Mobility Challenge with its website www.eujourneyplanner.eu and raised general public awareness of travel information and multi-modal planners.
- There is focus on long distance travel. There is no particular focus on the main nodes in the TEN-T network and their local and regional connections. The integration of travel information at urban level should be given a higher priority.
- A European portal covering all issues related to public transport (existing multimodal journey planners, technical documentation, links to providers, ticketing applications, etc.) was mentioned during the public consultation as a potential valuable initiative.
- The quality of travel information varies to a large extent. The study towards an EU multimodal journey planner states that data reliability is a prime need and gives several recommendations on data access.
- Development of local journey planners in the least privileged parts of Europe should be supported.
- Standardisation for the scaling up and take-up is very important. The EC should remain in a neutral position towards technologies.

Action 7 Access to green zones

- The EC launched and published a study on the different access rules for the different types of green zones across the EU and improved the knowledge on how the different systems work in practice.
- Stakeholders embrace the study as a powerful policy instrument for addressing the major challenges of urban sustainability (e.g. air quality, congestion, the role of non-motorised modes).
- The EC facilitated the exchange of good practices through the publication of the study and the website on Europe-wide low emission zones.
- However, the EC should provide stronger support for the exchange of experience and best practices.
- It is hard to identify best practices, because:
 - The availability of data on the impacts of scheme implementation is extremely limited. There is a need for the assessment of ARS, including evaluation frameworks, key indicators, monetary valuation parameters, minimum data requirements and methodological guidance.
 - Some respondents indicated that at present there is insufficient evidence for the effectiveness of green zones and the availability of similar schemes. They suggest that the EC could assist in gathering and complementing the results of studies aimed at exploring the effectiveness and impacts of such schemes.
- The exchange of best practices should be addressed, not only to local authorities, but also to road operators and road transport service providers.
- Within the subsidiarity principle and given the uniqueness of cities, the EC plays and can play an important role. The EC should seek the right balance between harmonisation (and the benefits it offers) and the right of local authorities to implement their own solutions.

Action 8 Campaigns on sustainable mobility behaviour

- The EC continued to support the organisations at all levels, including the European Mobility week.
- A special award to encourage the adoption of sustainable urban mobility plans has been implemented.

- The award scheme has been changed: from the registration of cities (as in the European Mobility Week) to the registration of awareness-raising actions promoting sustainable urban mobility which is open to everyone (an example is the the Sustainable Urban Mobility Campaign).
- The Sustainable Urban Mobility campaign (do the right mix) is recognised as a key step to further involve the civil society in addressing the sustainable urban mobility challenges and in engaging the exchange of best practices. It is a key step to involve “multiplicators and disseminators” at all levels to obtain a widespread take-up.
- Promotion should be adapted to each country in terms of culture, way and style of life, language.
- The EC should provide a framework for an EU-wide campaign, complemented by national structures that support local activities (combination of top-down and bottom-up).

Action 9 Energy-efficient driving as part of driver education

- By the adoption of EC Directive 2012/36/EU in November 2012 , the ability of the applicant to drive economically and in a safe and energy-efficient way shall be assessed by the examiner during the driver test as per 1-1-2014. Due to this Directive, the measure is also compulsory with regards to private drivers.
- The EC funded several projects (ECODRIVEN, ECOWILL, ECOeffect, ecoDRIVER,UDRIVE)

Action 10 Research & Demonstration projects for lower and zero emission vehicles

- The EC continued its support to research and demonstration projects and funded new projects related to electric vehicles, including an ‘electromobility’ demonstration project.
- Major recent and older initiatives carried out by the EC in the area of clean vehicles, are directly or indirectly related to APUM. These initiatives have led to an impressive number of projects and actions that support the introduction of vehicles on more or less clean energy (bio fuels, hydrogen, and electricity).
- Some stakeholders (from non-automotive background) state that the focus of this Action is a bit too car-oriented and industry-led.
- It is evident that the described initiatives of the EC boosted industrial developments in the areas of electric and fuel-cell vehicles and in the introduction of these technologies in urban applications. However, these technologies are still in the phase of pilot schemes and mass market uptake is still unsure.
- At the same time it is important to realise that electro-mobility is not the sole solution for (near) zero transport and mobility, although important in urban areas. Conventionally fuelled vehicles still have significant room for improvements, in terms of energy consumption and CO₂ emissions. In addition, different liquid and gaseous alternative fuels will be part of the fuel mix in the decennia to come.

Action 11 Internet guide on clean and energy-efficient vehicles

- The EC continued to develop an internet-based guide on clean and energy-efficient vehicles (the Clean Vehicle Portal).
- This portal facilitates EU-wide information on lifetime costs of energy consumption and emissions of pollutants of actual vehicles on the market as well as on existing procurement rules and incentive schemes for clean vehicles and market shares. It also gives access to a lifetime cost calculator.
- The EC can raise awareness and obtain widespread take-up by activating dissemination at Member States level. This might be done by linking national platforms to an EU-wide network.
- Fleet owners (both public and private) should be able to obtain a return on their investment. Currently, there is a gap between the costs in real-money between green and traditional vehicles. This is related to action 12 (Study on Urban Aspects of the

<p>Internalisation of External Costs).</p> <ul style="list-style-type: none"> • The directive is specifically aimed at road vehicles, making the present scope of the website in line with the directive. However, extending the objective to include mode change towards greener modes (slow modes and public transport in passenger transport, rail, water and pipeline in freight transport) should be in line with the policies from the WPT 2011.
<p>Action 12 Study on urban aspects of the internalisation of external costs</p> <ul style="list-style-type: none"> • The EC launched a methodological study on the urban aspects of the internalisation of external costs. • The study looked at the effectiveness and efficiency of various pricing solutions. • When pricing schemes are correctly implemented, they can be successful in reducing external effects of urban mobility. • When sufficiently adapted to the local circumstances, pricing schemes can prove to be self-financing and generate net revenues for the city. • Acceptability of the scheme can be improved through good communication upfront, by clear use of the revenues and by regular feedback to the users about the monitoring results of the scheme. • The general objective of the Commission's initiative to propose a strategy to internalise external costs generated by transport and according to the principle of 'polluter and user pays', is strongly welcomed by stakeholders.
<p>Action 13 Information exchange on urban pricing schemes</p> <ul style="list-style-type: none"> • The EC facilitated information exchange amongst experts and policymakers on urban pricing schemes in the EU by establishing a Joint Expert Group on Transport and the Environment and by funding and publishing project and study reports. • City networks would welcome a more structured dialogue at EU level with other stakeholders (including road operators and road transport service providers) to complement existing local and national processes. • The Joint Expert Group reported, based on the review of previous studies, - both on successful and failed city charge projects across Europe - and identified barriers and drivers of urban road-charging schemes. The key prerequisite for the introduction of a city charge is providing sufficient public support. However, to provide this support, the following is important: <ul style="list-style-type: none"> ◦ <i>To integrate all groups involved into the planning process at an early stage;</i> ◦ <i>To compensate groups particularly disadvantaged, for example with special charge rates or tax reliefs;</i> ◦ <i>To enable open communication and provide objective information (media marketing);</i> ◦ <i>To show the public where the revenue goes to;</i> ◦ <i>To at least use a part of the revenue for the purpose of financing attractive alternative modes of transport.</i>
<p>Action 14 Optimising existing funding sources</p> <ul style="list-style-type: none"> • The EC has, in addition to its ongoing activities, considered new targeted RTD and demonstration activities relevant for urban mobility. There is now a dedicated priority area on 'Ensuring Sustainable Urban Mobility' within FP7. • The EC maintained its support to the STEER project. • There is a strong need for the enhancement of explicit indicators to evaluate the use of resources and results of the projects that have been financed. The improvement of these aspects could optimise the allocation of resources and identify worthy projects to be supported by more than one funding period. • Even now there is a dedicated section on funding on the ELTIS website and several

stakeholders mention that for them it is very difficult to obtain a good overview of the variety of funds, programmes and calls through which the EU intends to improve urban mobility and urban environments.

Action 15 Analysing the needs for future funding

- The EC continued to financially support the successful CIVITAS Initiative beyond the third generation of projects that started in 2008.
- Although, the budget allocated to CIVITAS since 2002 has been €180 million, the share of the new call for CIVITAS Plus II (€18 million), is relatively low compared to the ongoing CIVITAS Plus phase (€80 million).
- The positive impact of CIVITAS is considered to not only be the support for technical experiments, but also of the same importance to understand the processes through which sustainable urban mobility can be achieved (drivers and barriers).
- The EC examined the future funding needs that urban mobility improvements involve.
- The current financial frameworks have a positive impact towards cleaner and better transport in cities, however, they do not trigger the negative cost-benefit ratios or the large-scale deployment of 'risky' or controversial measures (such as road pricing, alternative fuels, etc.) enough.
- The study on financing needs proposes the creation of a new financial instrument to take a strategic view of how best to address the capabilities, capacities and innovation requirements of local agencies to deliver significant gains in urban mobility outcomes. It could enable the EU in providing a central role in realising the greatest potential gains in urban transport sustainability across economic, financial, social and environmental outcomes in the long run and provide a foundation for raising capabilities across cities in Europe.

Action 16 Upgrading data and statistics

- The EC has launched a study on data and statistics with regards to urban mobility, which addressed the lack of data and statistics in this field.
- The draft study report (The study has not been finalised yet) shows that there are many problems and gaps in urban transport statistics.
- The recommendations from the study on data collection improvement include:
 - providing guidelines for use of common concepts
 - providing financial incentives for the making of urban travel surveys
 - more synergy with other projects
 - focusing on the urban dimension while modelling energy and emission, and
 - supporting further quantitative research on the relation between physical activity and health as well between pollution and health.
- The suggestions of the respondents to the survey and on the implementation of the APUM are generally in line with the recommendations of the study. In addition, stakeholders expressed difficulties and problems in achieving proper and harmonised urban transport statistics.

Action 17 Setting up an Urban Mobility Observatory

- The EC has set up an urban mobility observatory in the form of a virtual platform (website).
- The platform includes a database with information on the wide range of tested solutions already in place, training and educational material, staff exchange programmes, and other support tools. It also provides an overview of EU legislation and financial instruments relevant to urban mobility.
- The objective of the website fits the need.
- The overall awareness of the website still remains low and should be expanded by the announced marketing plan.
- The potential of the website is much greater than its present use. Some links with other

Actions are missing. As an example, there is at present no direct link from the website on clean vehicles in Action 11 to the ELTIS website.

- Links to national initiatives could expand the functionality and use of the site.

Action 18 Contributing to international dialogue and information exchange

- The EC facilitated dialogue, city-twinning and information exchange on urban mobility with neighbouring regions and global partners, using existing platforms and financial mechanisms. As a first step, the EC opened the CIVITAS Forum network to cities from the Eastern neighbourhood, Mediterranean and African regions.
- Although not many stakeholders are aware of the action, the EC supports the international dialogue and information exchange on urban mobility through various means.
- The CIVITAS Initiative seems to be an appropriate instrument for international dialogue, given the multiple activities for information exchange with surrounding European regions and other continents in the world. As other regions in the world are under rapid development (e.g. many countries in Asia and Latin America), there seems to be a tendency towards a two-way exchange of knowledge and experiences.

Action 19 Urban freight transport

- The EC helped provide information on how to optimise urban logistics efficiency by funding projects and launching and publishing a study.
- The EC organised a conference on urban freight transport.
- At the conference the implementation of urban initiatives were assessed.
- The study on urban freight transport and logistics was concluded and recommended amongst others:
 - Urban freight transport plans should be part of sustainable urban transport plans (a high quality plan should be a prerequisite for the receipt of funding).
 - Disseminate guidelines by means of a single and already established website that showcases best practices.
 - Promote development of sustainable UFT (annual award scheme, priority within Marco Polo).
 - The study results are in line with the responses of the stakeholders on the consultation and implementation of the APUM.
 - Further action to be taken by the EC is the integration of passenger and freight transport and the importance of both elements in sustainable transport planning.

Action 20 Intelligent Transport Systems (ITS) for urban mobility

- The EC offered assistance on ITS applications by launching an ITS expert group and by launching, as part of the 2013 FP7 Transport Call for Proposals, an important topic on 'Managing an integrated multimodal urban transport network', which will support the work of the Urban ITS expert group.
- The EC launched a study on improving the interoperability of ticketing and payment systems across services and transport modes (Study on Public Transport Smartcards).
- The study on Public Transport Smartcards states:
 - The EC should lead the further integration of smart card systems across Europe, as market parties cannot fully solve the issues of interoperability by themselves.
 - The EC should make efforts to develop not only technical standards, but also develop implementation and operation examples through a 'model scheme'.
 - A vision and action plan is considered necessary to enable further development with continuing engagement of the EC with those designing, implementing and operating the schemes
- The Expert Group on ITS produced a best practice manual for the applications of urban ITS, guidelines for deployment and an identification of the needs for further standardisation at European level. Within the public consultation, some respondents

maintained that cities were insufficiently represented in the Urban ITS Expert Group.

9.2 Main findings overall

The European framework research Programme (since 1998), the CIVITAS Initiative (since 2002) and recently the Smart Cities Initiative together, form a profound basis for further actions to achieve sustainable urban mobility. From 1998 until present day, the EU has invested approximately € 300 million in urban transport research.

The APUM and related Green Paper on Urban Mobility can be regarded as important stepping stones towards a fully integrated vision (and related future actions) on urban mobility. The action plan has led to the White Paper on Transport 2011 being more concrete in its aims and addressing transport, climate and environmental issues. The local strategies for better and more sustainable urban mobility and the plans that underpin them¹¹⁷ relate to several White Paper initiatives, such as passenger rights (21), seamless door-to-door mobility (22), travel information (27), urban mobility plans (31), EU framework for road user charging (32), urban logistics (33) and funding (37 and 38).

The review indicates that all actions have been continued forward and that many initiatives (i.e. studies, projects and conferences) have been deployed over the past years. Progress has been made and many objectives have been achieved which is acknowledged by several stakeholders. However, we do have some remarks for follow up:

- The review shows that there are cases where the Action Plan presented “a declaration of intent” rather than a specific action.
- The review shows that there are possibilities and necessities to build upon the actions. I.e. the EC should continue to develop its urban transport policy.
- The review shows that the EC should become more transparent (at national and local level) in raising awareness regarding sustainable urban mobility and explain its role in this.
- The review shows that the respondents who specified how they received their information on the (implementation of the) actions, received the information from the EC, through discussion with other stakeholders on the action plan or through direct personal involvement. I.e. the majority of the respondents have a direct relation with the EC or European Associations and/or are European associations themselves.

The EC has done useful work but it has been difficult to obtain widespread take-up. An important reason seems to be that the necessary “multiplication and dissemination” at MS-level has not taken place. More efforts at national level are needed to change things on ground level. From the campaigns on sustainable urban mobility behaviour, we draw the conclusion that the EC should provide a framework for an EU-wide campaign, complemented by national structures that support local authorities (combination of top-down and bottom-up).

¹¹⁷ Additionally mentioned as one of the topics in the public consultation of the EC on urban mobility (September 2-012 – 17th of December 2012)

9.3 Recommendations (looking forward)

There are as many European cities as there are differences amongst them, however, the challenges to reduce energy consumption and traffic congestion and to improve air quality and safety, are shared. Urban transport policies should be based on the (possible) impact of an integrated package of actions. Developed key performance indicators within CIVITAS might be a good reference. Recommendations for EU actions, based on findings from specific EU initiatives (i.e. studies of the APUM, CIVITAS, ITS Action Plan, Smart Cities) are clustered below:

Funding sources

- The EC should encourage the use of innovative financial instruments, such as project bonds (as in the project bond initiative, the loan guarantee instrument and connecting Europe facility) and should encourage new business models, allowing for more Public Private Partnerships that point out the benefits for the private sector;
- The focus of future EU Regional Policy will be enhanced on urban issues (since October 2012 DG REGIO changed its name to the Directorate General for Regional and Urban Policy). In the 2014-2020 programming period the support of Regional Policy should be focused on sustainable forms of transport, based on the lines set in the White Paper on Transport. Therefore, the development of integrated urban mobility plans should be a priority. Key actions identified under the investment priority of supporting a multimodal Single European Transport Area in the draft Regulation for the 2014-2020 programming period, governing the European Structural and Investment Funds, include deployment of intelligent transport systems, adequate pricing for the use of infrastructure and an urban mobility concept. In fact, developing environmentally-friendly and low-carbon transport systems and promoting sustainable urban mobility is one of the investment priorities under Thematic Objective 7 of the DRAFT Common Provisions Regulation for the 2014-2020 programming period. The desired actions should include:
 - developing integrated, sustainable and accessible urban mobility concepts in cities, city-regions and metropolitan areas, leading to reduced GHG emissions, according to sustainable urban mobility plans (SUMPs), including facilitating use of public transport, cycling and walking; promoting clean fuels and vehicles and the implementation of schemes for in-city_user charging and access restrictions;
 - promoting innovative road pricing, user charging systems and traffic management and in fuelling and charging infrastructure for new carbon-free vehicles for urban transport.
- European funding and co-financing of urban transport projects should be conditional upon the existence of SUMPs and underlying action plans, in order to not fund the projects, but the outcomes thereof (possible impacts).

Guidelines

The development of SUMPs may be seen as a framework for integrated sustainable transport. However, there is no official EU document as of yet with a SUMP definition. The review shows that topics (for example mobility possibilities and needs for persons to allow them to reach educational, work and social activities) are linking several actions of the APUM (in the given example: SUMP (Action 1), health (Action 3), passenger rights (Action 4), accessibility (Action 5) and financial Actions (2, 14, 15)). An integrated vision will link Sustainable Urban Mobility Plans with Sustainable Energy plans and Sustainable Logistics plans, as well as with actions resulting from the Smart Cities Initiatives that foster integrated approaches for energy, ICT and mobility. To let SUMP function as an integrated framework and as a basis for funding and impact, the following recommendations for EU action are suggested:

- The EC should take a leading role in offering a non-obligatory standard package for green zones to urban authorities. This should include definitions (green zones, low emission zones, restricted access zones) and methods of enforcement (physical closure, pricing, stimulation).
- The EC should take a leading role in defining a SUMP including a package of possible (best practice) actions and impacts of actions in a SUMP. An example for an action to be included may be the internalisation of external costs and the use of charging instruments (see also recommendations following from Action 12).
- The study 'Towards a European multimodal journey planner' concluded that the EC has a role to play in promoting smoother access to transport data and its quality standards.
- The EC should support the idea of open data and quality assurance for travel information.
- The EC should take a leading role in the recommendation of best practices for the assessment of instruments including issues such as, evaluation frameworks, key performance indicators, monetary valuation parameters, minimum data requirements, and methodological guidance.
- The study on data and statistics (Action 16) was not finalised in 2012 and the EC should play a facilitating role in taking up the results of the draft study on data and statistics, as soon as possible:
 - financial incentives for the making of urban travel surveys
 - more synergy with other projects, such as the EPOMM+/TEMS database, the SHANTI project and the CARE database
 - focusing on the urban dimension while modelling energy and emission and support further quantitative research on the relation between physical activity and health, as well as between pollution and health

Alternative fuels

- It is worth investigating whether the added value of driving with an eco support system, in terms of extra emissions reductions, should be integrated in current policies and requirements on top of the now existing requirements for clean vehicle engines (EURO VI).
- There are high expectations with respect to the future of electro-mobility. At the same time there are still many technical, operational and economic challenges. In this light, objective monitoring of the developments and in particular, of practical experiences, is important for keeping expectations realistic and for optimal policymaking on all levels. The European

Electromobility Observatory (EEO) is an important instrument for this. European RTD programmes should support these as well and a clear view on the development of the fuel mix for transport and mobility at European and national levels is needed.

Dissemination

It has been difficult to obtain widespread take-up. An important reason seems to be that the necessary "multiplication and dissemination" at MS-level has not taken place.

- The EC should provide a framework for an EU-wide campaign, complemented by national structures that support local authorities (combination of top-down and bottom-up).
- It is important for the EC to be more transparent and to continue raising awareness on the sustainable urban mobility goals and possible instruments. There are more national and local partners as coordinators needed to avoid reaching organisations and citizens that have already adopted sustainable behaviour and the dissemination methodology of the Sustainable Urban Mobility campaign supports this.
- Continue raising the awareness of policymakers (and finally the public) to provide quantitative data regarding energy and cost reduction connected to eco-driving with and without technical support systems. This could be supported by a European study and Communication.
- Results of the Urban ITS Expert Group should be promoted on the EC portals that deal with urban mobility (the open data portal of DG Connect, DG Move, DG Regio), in order to get the broadest uptake of actions.

Annex 1 Survey

This document has been attached as a separate document.

Annex 2 Amount of respondents

The total number of respondents on the survey on the implementation of the APUM was 116. The table below shows the amount of respondents per action on the question of awareness of the action and its results.

Respondent type theme 1	Amount of respondents on questions on action 1	Amount of respondents on questions on action 2	Amount of respondents on questions on action 3
City and Regional Administrations, City Networks, Authority Networks	19	16	16
Professional associations, Academia & Research	20	16	16
NGOs	11	10	11
Member State Representatives, Transport Operators, Workers Organisations, Consumer Associations, Others	12	7	7
Total	62	49	50

Respondent type theme 2	Amount of respondents on questions on action 4	Amount of respondents on questions on action 5	Amount of respondents on questions on action 6	Amount of respondents on questions on action 7	Amount of respondents on questions on action 8	Amount of respondents on questions on action 9
City and Regional Administrations, City Networks, Authority Networks	14	14	15	14	14	13
Professional associations, Academia & Research	16	15	15	15	16	13
NGOs	8	6	7	7	7	7
Member State Representatives, Transport Operators, Workers Organisations, Consumer Associations, Others	9	9	8	7	8	7
Total	47	44	45	43	45	40

Respondent type Theme 3	Amount of respondents on questions on action 10	Amount of respondents on questions on action 11	Amount of respondents on questions on action 12	Amount of respondents on questions on action 13
City and Regional Administrations, City Networks, Authority Networks	14	15	15	15
Professional associations, Academia & Research	18	17	18	18
NGOs	7	7	6	7
Member State Representatives, Transport Operators, Workers Organisations, Consumer Associations, Others	8	8	7	7
Total	47	47	46	47

Respondent type theme 4	Amount of respondents on questions on action 14	Amount of respondents on questions on action 15
City and Regional Administrations, City Networks, Authority Networks	12	12
Professional associations, Academia & Research	15	15
NGOs	7	7
Member State Representatives, Transport Operators, Workers Organisations, Consumer Associations, Others	5	5
Total	39	39

Respondent type Themes 5 and 6	Amount of respondents on questions on action 16	Amount of respondents on questions on action 17	Amount of respondents on questions on action 18	Amount of respondents on questions on action 19	Amount of respondents on questions on action 20
City and Regional Administrations, City Networks, Authority Networks	13	12	11	12	11
Professional associations, Academia & Research	13	16	11	15	17
NGOs	6	5	6	7	6
Member State Representatives, Transport Operators, Workers Organisations, Consumer Associations, Others	11	6	8	7	8
Total	43	39	36	41	42