

**CiViTAS**  
Cleaner and better transport in cities

**VANGUARD**  
.....

**Report**  
**Results exploitation**  
**workshop #3**  
**CO<sub>2</sub> free city logistics**

Mobiel 21 and Agency NL



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## Contents

- Contents..... 2
- Practical organisation ..... 3
  - 1.1 Promotion ..... 3
  - 1.2 Registration ..... 3
  - 1.3 Pre-event information and participant packs ..... 3
  - 1.4 Audience composition ..... 3
  - 1.5 Evaluation..... 4
- Workshop content ..... 5
  - 2.1 Introduction ..... 5
  - 2.2 City free logistics, an overview ..... 6
  - 2.3 Peak deliveries, special zones and heavy duty vehicles..... 7
  - 2.4 The Cargo Bike as an alternative..... 8
  - 2.5 Examples from Brescia..... 9
  - 2.6 Panel discussion ..... 9
  - 2.7 Showcase from CIVITAS I, Rotterdam: opportunities beyond CIVITAS..... 10
  - 2.8 CIVITAS opportunities for potential 'take-up' cities ..... 11
  - 2.9 CIVINET, Local support in your Language ..... 11
  - 2.10 A workshop on how to improve carbon-free logistics in your city..... 11
  - 2.11 Conclusions ..... 13
  - 2.12 Side events..... 13

## Practical organisation

In this chapter we will give an overview of the third CIVITAS VANGUARD results exploitation workshop. The aim of the workshops is to disseminate the results of CIVITAS. There will be four workshops, each focusing on two of the CIVITAS thematic categories.

The third results exploitation workshop was held in October 2012 in Rotterdam (The Netherlands). This workshop presented examples from the themes of city freight distribution and clean vehicles. The two areas are looked at from a perspective of CO<sub>2</sub> free city logistics. The aim of the workshop was to transmit CIVITAS results and innovative practices to non-CIVITAS cities and other relevant stakeholders. This third workshop was hosted in parallel to the EEAC/RLI Conference '[Keep Moving towards Sustainability](#)'. Good presentations and plenty of time and forms for discussion were at the heart of the workshop.

### 1.1 Promotion

The promotion for this second CIVITAS VANGUARD results exploitation workshop was primarily done via the CIVITAS website ([www.CIVITAS.eu](http://www.CIVITAS.eu)), the internal CIVITAS Plus newsletter and the external CIVITAS newsletter, MOVE. The event was also hosted on the Eltis website. CIVITAS VANGUARD consortium partners, dissemination managers and speakers were asked to promote the event through their own channels. In addition to this direct mailings were sent to the CIVITAS contacts database.

### 1.2 Registration

Participants were encouraged to register on the CIVITAS-website ([www.CIVITAS.eu](http://www.CIVITAS.eu)) via a registration tool; they had the possibility to register as from two months before the event. The registration tool closed 1 week before the training.

### 1.3 Pre-event information and participant packs

Before the workshop the following documents were made available on the CIVITAS-website and were sent directly by e-mail to the participants:

- Programme
- Practicalities document (getting there, hotels, etc.)
- Information on the EEAC conference

At the event the participants received the final programme, the list of participants and the CIVITAS II relevant Policy Advisory Notes. In the days following the event, presentations were posted online.

Participants were thanked via email for joining the workshop and were made aware of the online presentations, and asked to complete the online evaluation. Furthermore they received a book of the European project Sugar thus providing cross-programme information on city logistics.

### 1.4 Audience composition

In total, 48 individuals registered for the workshop. As the venue had a capacity of 40, around late registrations were accepted, in view of expected no-shows. In the end, 43 people

attended the workshop. A number of these visited the EEAC conference as well, so that both conferences had a positive influence on each other.



## 1.5 Evaluation

The results of the questionnaire show a very good evaluation of the third VANGUARD dissemination workshop. Both content as format are evaluated as good or very good by almost all respondents. 95% of the respondents would recommend this workshop to someone else. For the majority, there was a good balance between theory and practice in the workshop, although 12 % said there was too much theory. Participants gained some insights in CIVITAS and learned from experiences from other cities. Insights gained could generally be useful as input for their own professional situation. More information is on request available in the evaluation report.

Other key findings:

- Participants are interested in Forum or other events, so important to sponsor these at next workshops
- E-mail contacts were indicated as an important source of information.

# Workshop content

## Session 1: CIVITAS and carbon dioxide-free logistics

### 2.1 Introduction

**Mark Major, European Commission, DG MOVE**

After an overview of the programme and a short introduction of the CIVITAS Initiative given by the moderator of the day Rick Lindeman, it was up to Mr. Major to set the scene of this workshop. He gave an introduction about the European Union's (EU) role in urban mobility. The EU has two instruments to operate: binding EU-legislation and financial support. Additionally, the EU can organise a discussion and debate about a specific policy. At the end, the European Parliament still has to take a decision. The role of the DGs is to propose plans, but it is up to the parliament and the Council to take the decision. The rule of subsidiarity states that only if it's better to solve a problem on a European level, instead at a local/city level, the European Commission will act. Mr Major emphasizes he is aware of this contradiction: On the one hand cities are faced with a lot of challenges on air quality, green house gas emissions, etc., topics the European Commission should deal with. But on the other hand European cities don't have a voice in the formal decision making process.

Mr. Major also informed about the fourth phase of CIVITAS that will start soon, including two CIVITAS projects and one support action. The CIVITAS initiative will be continued within the currently developing Horizon 2020 programme, although the details are not defined yet.

Participants are encouraged to have a look at the 2011 **White paper Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system**. The White Paper gives an outlook for challenges and solutions for the next decade. Goals for reductions in greenhouse gases are described, e.g. the goal to realise a 80-95% reduction below 1990 levels by 2050. For the transport sector, the reduction should be 60%. Two out of ten goals in the White Paper are dealing with urban transport: (1) halve the use of conventionally-fuelled cars in urban transport by 2030 and (2) achieve essentially CO<sub>2</sub> free logistics in major urban centres by 2030.

Mr. Major also pointed on the communication on **Smart Cities & Communities** (July 2012). Transport, energy and ICT are brought together in an integrated approach. The Smart Cities philosophy is to identify common challenges, to develop innovative, replicable solutions, to bundle demand from cities, to attract businesses and banks, and to create markets. This Smart Cities approach will be a large scale project that brings solutions to the market. The White Paper addresses 40 specific actions that the commission will take. Not all those actions have been worked out yet.

The EC will work on several topics in Summer 2013:

- Sustainable urban mobility plans (link EU funds to sustainable urban transport strategy)
- Framework for urban road user charging and access restriction zones
- Zero-emission urban logistics – in major urban centres by 2030

Mr. Major invites all participants to think about the following questions: “What do you want to see in the proposals/initiatives, understanding the constraints of the European action?”. In the Urban Freight Study, 10 recommendations for EU Policy have been made (e.g. internalisation of external costs, promotion of low emission vehicles, research and technical development, ITS standards etc). Nothing seems revolutionary here, so all feedback is welcome.

In order to prepare the Urban Transport Package, a Public Consultation was launched recently and will close on 17 December 2012.

See: [http://ec.europa.eu/transport/consultations/index\\_en.htm](http://ec.europa.eu/transport/consultations/index_en.htm)

## 2.2 City free logistics, an overview

**Barry Ubbels, project evaluation manager CIVITAS RENAISSANCE, Panteia/NEA**

Mr. Ubbels gave a broader perspective on freight in relation to CIVITAS. He presented several case studies, some types of measures, results for three measures and some conclusions.

### *Urban Freight transport*

In the world of urban freight transport demand and supply are dominated by private organisations. Sustainability is not their first priority. Different sectors are involved in urban freight, like hotel and catering industry, retail, courier and the waste sector. Road transport is dominant and freight vehicles represent 8-15% of total traffic in urban areas.

Urban freight is characterised by some inefficiency of distribution: low load factors and long dwelling times. Often industry lacks an incentive to minimize costs: the last mile has only a small share in the overall trip costs. Measures that give an incentive to both private operators and customers will be the most effective.

Some measures may be regulatory (time zones, low emission zone, vehicle restrictions), whereas others may internalise external costs (road pricing, mobility credits). Land use planning is an important tool to plan new developments. Mr Ubbels advises a holistic approach that takes urban freight into account. Most important is to start with an integrated vision, in a framework of a Sustainable Urban Mobility Plan.

### *CIVITAS experience*

Let's look on what can be learned from urban logistics examples within CIVITAS. Short research shows some effects, but there are ways to take those measures to an higher level. Within CIVITAS Renaissance, which involves the cities of Perugia, Bath, Gorna-Oryahovitsa, Szczecinek and Skopje, only a few measures focusing on urban freight have been implemented. Although three cities have developed a SUMP, Mr. Ubbels is unaware whether freight transport has specifically been addressed and whether it's really a challenge in these cities. Only Bath and Perugia have included urban freight measures.

In **Bath (UK)** the key political concerns were: congestion, air quality, road safety, damage to the fabric of historic buildings. Two measures were presented: the monitoring of Heavy goods vehicles (HGV's) movements and the set-up of an urban freight consolidation centre.

Heavy Goods Vehicles were breaching environmental weight restrictions in Bath. Cameras and a vehicle-actuated sign were installed on an east-west route with a 7.5 tonne weight restriction. Remarkable is that without a 'fine system' truck drivers take the by-pass road, which is a detour in comparison to the road through the centre. The incentive to take the other road was only to obey the law.

The urban freight consolidation centre is a combined centre for the cities of Bath and Bristol. However, the centre has a very local impact. Only few companies used this consolidation centre, so there is room for take-up also in perspective of the financial crises. The city of Bath is looking for a self-financing model, but the recession is a barrier. The system is not compulsory for companies.

The **city of Perugia (Italy)** faces similar key-challenges as Bath, the city has severe problems with congestion as the historic centre is situated on a hill top. Some years ago, the city has implemented a Lower Traffic Zone (LTZ) and built a minimetro to give efficient passengers access to the city centre. A feasibility study has been made for an innovative system for freight transport, called Pipenet: a system of vacuum sealed tubes to deliver freight packages in the city centre. The city is now working on understanding and interpreting the results.

### *Conclusion*

Urban Freight Transport has been modestly addressed in CIVITAS Renaissance. It looks like this topic is not considered as a real problem and that cities have other priorities. In the cities we see a small impact where follow-up is needed. Innovation may lead to real changes. Mr. Ubbels doesn't know if Pipenet is a really good example. You could say, awareness has been raised, and this allows for transition. Transition is needed for change and this can be influenced: 80% is process, 20% is innovation.

Mr Ubbels advices to introduce legislation that provides the sector with appropriate price signals which lead to real impacts (behavioural change).

## ***Session 2: Practical examples from CIVITAS Cities***

### **2.3 Peak deliveries, special zones and heavy duty vehicles**

#### ***Gustav Friis, City of Aalborg***

Since the mid-nineties the Danish city of Aalborg has investigated the potential for city logistics. Main focus was goods distribution in city centres, in pedestrian zones without disturbing the life of people. In 2001 a collaborative project with the Ministry of transport has been set-up. It proved to be a success in the following aspects: registration of time consumption in pedestrian areas, change in direction of travel, road space for offloading and giving way, co-ordinating delivery service. Other things didn't work, such as: two persons in one vehicle and last mile delivery service.

The main driver for success was creating a platform with all the involved stakeholders and make them collaborate. Every opinion and interest is valid, changes happen on the basis of stakeholder voluntariness.

Within CIVITAS Archimedes those measures are further developed in the context of Low Emission Zones (LEZ). In 2009 the LEZ has been implemented to meet the European requirements, so trucks and buses above 3.5 tonnes couldn't enter the zone. The evaluation shows the LEZ has pushed forward the change to newer vehicles. However, it was difficult to see any changes in air quality. A shift distribution of trucks on EURO norms has been measured and a decrease in emissions as well. The Danish Environmental Protection Agency has elaborated a report which states that on short term there is a small, positive effect on air quality.

Besides the LEZ, the city has joined a national project looking for possibilities for off peak distribution in cities. Four Danish cities (Copenhagen, Aarhus, Odense and Aalborg) are investigating what they can do to avoid congestions and how they can minimise CO<sub>2</sub>-emissions from freight. All stakeholders are involved. Noise reduction will be taken into account. The cities will now start their pre-analysis for the heavy duty vehicle strategy to know the flow of goods vehicles in the city centre. The flow can be useful to revise the current time window for distribution. The strategy involves specific initiatives on regulation, ITS, management and further cooperation between the city, freight operators, shops etc.

At this moment, the LEZ only applies to trucks, but vans can be included in the LEZ if the limit values for emission are exceeded. An interesting detail is that the fine for drivers is about 700 Euro, but for the company it is about 2,000 Euro.

## 2.4 The Cargo Bike as an alternative

**Rick Lindeman (Agency NL) on behalf of Iratxe Garcia - City of Donostia-San Sebastian**

The historic centre of the city of San Sebastian is situated on a peninsula. So there are not many roads leading into this part of the city and there is high chance for congestion. This is an important reason for implementing urban freight measures.

One solution was to identify three specific time windows, instead of different time windows for different streets. Another measure was to introduce bicycle couriers. One important advice to give is that personal contacts are very important to convince shop keepers to use this service.

Another measure was the consolidation of a distribution centre. This building has been equipped for the reception of goods in bulk and for their posterior delivery with effective, ecological vehicles like the Cargobikes. These bikes, TXITRANS, are quite expensive, and they mainly serve as complementary and not as a substitute for vans.

A video about the carbobike was shown, more information can be found on: [www.txita.com](http://www.txita.com).

## 2.5 Examples from Brescia

***Mr. Giandomenico Gangi – Site Coordinator Brescia – Responsible Mobility and PT Dept.***

This presentation has been cancelled at the last moment because the speaker was unable to attend the workshop.

## 2.6 Panel discussion

The speakers participated in a panel discussion, with questions from the audience. One of the questions was what the EC could do in terms of legislation. Mark Major replied that the EC can make a directive with a tool a city can use to implement a LEZ with some standardised options. “*The same could be the case for a measure about pricing strategies*”, Barry Ubbels added.

Another question was what is the main driver for cities to take urban freight measures. Barry Ubbels stated that this depends from city to city, so each city should start with addressing key challenges from the city and use the right solutions/strategies. Gustav Friis added that you often need to balance different ideas and key challenges e.g. noise versus air pollution. Mark Major concluded that each city has many different drivers, for example Denmark has a national law to reach European legislation, and then there are local problems of individual cities.



*Mark Major*

## Session 3: Working on city logistics and clean fuels

### 2.7 Showcase from CIVITAS I, Rotterdam: opportunities beyond CIVITAS

#### *Lode Messemaker, City of Rotterdam*

The city of Rotterdam has a twofold ambition: keep its economically relevant position and move towards a more sustainable city. For this reason, 10 main goals to reach a higher level of sustainable mobility have been set up. Four of them are directly related to electric mobility. The benefits here are that even when you put 'dirty' energy in a car, the overall efficiency of your chain goes up. The goal is to have 1,000 electric points in 2014. Different measures are taken: charging infrastructure on demand as much as possible close to home; introducing electric two and three wheelers; invest on innovation projects; electrifying vehicle fleets and stimulating collaboration.

The city also requires that every new parking lot offers EV-charging possibilities, thus reducing the costs of introducing this at a later stage. Based on its experiences with innovative projects, Rotterdam advises other cities to involve as much as possible stakeholders in developing ideas and see how these fit within the cities vision.

The city of Rotterdam is trying to look at the total costs of ownership, including the hidden costs, and uses electric cars also within a car sharing scheme. *"Although we thought it would be the same, it wasn't"*, said Mr Messemaker: cables had been stolen and users sometimes forgot to reload...

Rotterdam promotes and facilitates projects of external stakeholders that implement innovations with electric mobility. This initiative needs to have added value for the city with a uniqueness for the region and needs to have potential for upscaling. One example is the first electric scooter factory in the Netherlands, QWIC, that settled in Rotterdam. QWIC wanted to move the production to the Netherlands. With the certainty of the intended future orders (including one from the city), the company had the ability to start new business and started to cooperate with the city and an educational institute. So as a city, you don't need to invest a lot of capital, to give companies an incentive to start a business.

Mr. Messemaker also presented 'Binnenstadservice Rotterdam' (inner city service), a projects that leads to a reduction of 150 trips/weeks because of the introduction of only one simple electric freight car.

The city of Rotterdam is also thinking about widening the scope for the Environmental Zone (LEZ) – which currently only addresses trucks of more than 3.5 tons - to vans as well. Concerning night-time distribution, a lot of measures can be made to make them less noisy. In the city there are noise constraints (23:00 – 7:00 < 60 dB). If you make your deliverable less noisy, you are allowed to distribute without respecting this timetable. As most of the city centres have time frame constraints (e.g. 7:00 – 17:00) at this moment, companies need to have different trucks so they can deliver all their goods. Due to this night time distribution, 17% CO<sub>2</sub> reduction was realised due to fuel savings.

The city of Rotterdam also makes use of the stars-system 'Ecostars' which should give incentives for transport companies. Problem is that incentives, that makes it interesting to make the fleet cleaner and to get stars, need to be found.

One of the participants remarks that one of Rotterdam's goals was a good accessibility for cars. Why is it not just a good accessibility? Mr Messemaker explains that from an environmental perspective, we should indeed ban the cars. But the city does not want to lose its economical power. It is moving towards the zero-emission, which is a good evolution.

## 2.8 CIVITAS opportunities for potential 'take-up' cities

### *Melanie Mattauch, ICLEI*

Melanie Mauttauch explains to the audience that CIVITAS has a number of further services offered to cities to maximise the knowledge that they can gain from the CIVITAS Initiative. The services that are referred to are:

- CIVITAS website ([www.civitas.eu](http://www.civitas.eu))
  - o city pages with contact details and measure descriptions
  - o search filter
  - o resource centre
- CIVITAS MOVE newsletter
- CIVITAS Forum Network
  - o CIVITAS Forum declaration
  - o Annual CIVITAS Forum Conference
  - o CIVITAS Awards
- CIVINET
- Study tour programme
- Thematic groups on Linked In

## 2.9 CIVINET, Local support in your Language

### *Willem Buys, CIVINET Netherlands*

Mr. Buys presented the CIVINET approach to sharing CIVITAS knowledge. This allows cities to communicate about CIVITAS and its result in their own language,

## 2.10 A workshop on how to improve carbon-free logistics in your city

### *Rick Lindeman, Agency NL*

The last part was an interactive workshop. This was divided into two segments. In the first the participants were consulted as (informal) part of the stakeholder consultation of the European commission regarding Carbon Free City logistics.

In several groups, the participants and speakers discussed the topics that the EC should not forget. The main suggestions were:

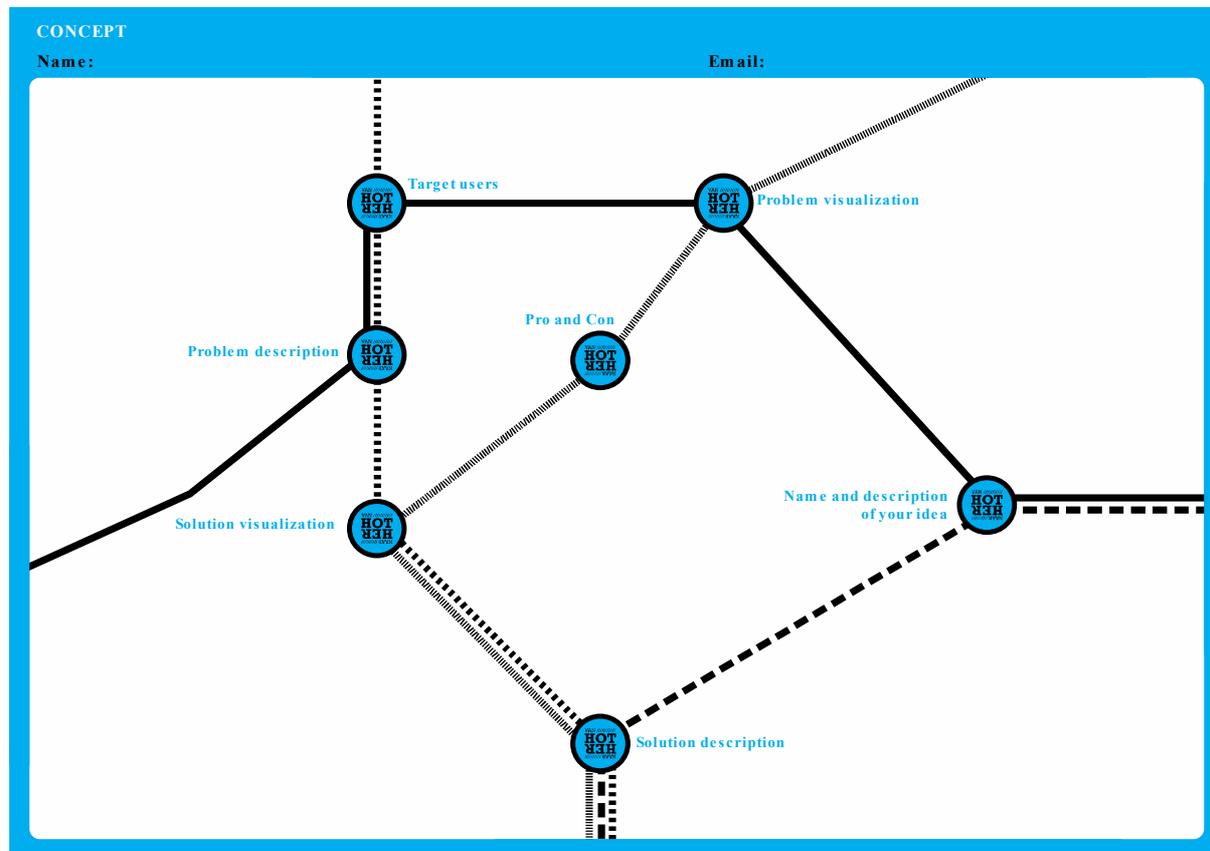
- consult cities: provide a formal city consultation procedure;
- offer flexible guidelines, related to different national legislations;
- make guidelines about what to measure;
- not only CO<sub>2</sub> but NOX is important as well;
- standardisation of new technologies;
- make city logistic part of SUMP and make cities aware of this element;
- give examples to cities;
- define approaches to make it a success;
- provide flexibility in legislation especially towards new technology;
- focus less on energy savings, but more on air quality;
- keep moving forward with incentives for clean vehicles;
- road pricing and congestion charging on a European level to bypassing discussion at a national level.

Mark Major was invited to comment on the results:

*“Giving feedback via informal contact is possible, we are not rejecting any suggestions. A formal process for cities doesn’t exist. The European Commission is very aware of different circumstances of cities, it’s about facilitating and giving the tools. If we develop a plan, national transport authorities need to be informed as well, so that they support the proposal. Don’t underestimate the role of local mobility departments, universities etc. in this story.”, he said.*

The second part of the workshop gave cities the opportunity to discuss their problems and solutions regarding carbon free city logistics among their peers. Using the format and using a technique called ‘service design thinking’ they were able to develop solutions. They could use the examples cited in the workshop as examples.

Examples of the solutions proposed were more integral restrictions and smarter use of electromobility.



Caption 1 Form used for workshop and site event

## 2.11 Conclusions

The conclusion of the workshop was that only a variety of measures can lead to carbon free city logistics. Due to the Civitas examples cities can pick and choose which measures will work in their city. The European commission can and will use all the examples and suggestions in their policy development.

## 2.12 Side events.

There were a number of extra actions to improve the experience for the participants.

- As said, it was organised in cooperation with the EEAC to provide synergy between two conferences
- There was a bike from cargo-bike company Vrachtfiets, to provide real-life examples (see below)
- Participants were invited to think out of the box, by going on a customer journey and participate in the Dutch national travel contest (using the template above)

