





## **Aalborg**

T 52.1 City Bike Scheme in Aalborg

Aalborg Kommune

September 2009



THE CIVITAS INITIATIVE
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## 1. Introduction

#### 1.1 Background CIVITAS

CIVITAS - cleaner and better transport in cities - stands for CIty-VITAlity-Sustainability. With the CIVITAS Initiative, the EC aims to generate a decisive breakthrough by supporting and evaluating the implementation of ambitious integrated sustainable urban transport strategies that should make a real difference for the welfare of the European citizen.

**CIVITAS I** started in early 2002 (within the 5th Framework Research Programme);

CIVITAS II started in early 2005 (within the 6th Framework Research Programme) and

CIVITAS PLUS started in late 2008 (within the 7th Framework Research Programme).

The objective of CIVITAS-Plus is to test and increase the understanding of the frameworks, processes and packaging required to successfully introduce bold, integrated and innovative strategies for clean and sustainable urban transport that address concerns related to energy-efficiency, transport policy and road safety, alternative fuels and the environment.

Within CIVITAS I (2002-2006) there were 19 cities clustered in 4 demonstration projects, within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects, whilst within CIVITAS PLUS (2008-2012) 25 cities in 5 demonstration projects are taking part. These demonstration cities all over Europe are funded by the European Commission.

#### **Objectives:**

- to promote and implement sustainable, clean and (energy) efficient urban transport measures
- to implement integrated packages of technology and policy measures in the field of energy and transport in 8 categories of measures
- to build up critical mass and markets for innovation

#### Horizontal projects support the CIVITAS demonstration projects & cities by :

- Cross-site evaluation and Europe wide dissemination in co-operation with the demonstration projects
- The organisation of the annual meeting of CIVITAS Forum members
- Providing the Secretariat for the Political Advisory Committee (PAC)
- Development of policy recommendations for a long-term multiplier effect of CIVITAS

#### **Key elements of CIVITAS**

- CIVITAS is co-ordinated by cities: it is a programme "of cities for cities"
- Cities are in the heart of local public private partnerships
- Political commitment is a basic requirement
- Cities are living 'Laboratories' for learning and evaluating





#### 1.2 Background ARCHIMEDES

ARCHIMEDES is an integrating project, bringing together 6 European cities to address problems and opportunities for creating environmentally sustainable, safe and energy efficient transport systems in medium sized urban areas.

The objective of ARCHIMEDES is to introduce innovative, integrated and ambitious strategies for clean, energy-efficient, sustainable urban transport to achieve significant impacts in the policy fields of energy, transport, and environmental sustainability. An ambitious blend of policy tools and measures will increase energy-efficiency in transport, provide safer and more convenient travel for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution). Visible and measurable impacts will result from significantly sized measures in specific innovation areas. Demonstrations of innovative transport technologies, policy measures and partnership working, combined with targeted research, will verify the best frameworks, processes and packaging required to successfully transfer the strategies to other cities.

#### 1.3 Participant Cities

The ARCHIMEDES project focuses on activities in specific innovation areas of each city, known as the ARCHIMEDES corridor or zone (depending on shape and geography). These innovation areas extend to the peri-urban fringe and the administrative boundaries of regional authorities and neighbouring administrations.

The two Learning cities, to which experience and best-practice will be transferred, are Monza (Italy) and Ústí nad Labem (Czech Republic). The strategy for the project is to ensure that the tools and measures developed have the widest application throughout Europe, tested via the Learning Cities' activities and interaction with the Lead City partners.

#### 1.3.1 Leading City Innovation Areas

The four Leading cities in the ARCHIMEDES project are:

- Aalborg (Denmark);
- Brighton & Hove (UK);
- Donostia-San Sebastián (Spain); and
- Iasi (Romania).

Together the Lead Cities in ARCHIMEDES cover different geographic parts of Europe. They have the full support of the relevant political representatives for the project, and are well able to implement the innovative range of demonstration activities.

The Lead Cities are joined in their local projects by a small number of key partners that show a high level of commitment to the project objectives of energy-efficient urban transportation. In all cases the public transport company features as a partner in the proposed project.

## 2. Aalborg

The City of Aalborg, with extensive experience of European cooperation and having previously participated in CIVITAS I (VIVALDI) as a 'follower' city, is coordinating the consortium and ensures high quality management of the project. The City has the regional public





transport authority (NT) as a local partner, and framework agreements with various stake-holder organisations.

Aalborg operates in a corridor implementing eight different categories of measures ranging from changing fuels in vehicles to promoting and marketing the use of soft measures. The city of Aalborg has successfully developed similar tools and measures through various initiatives, like the CIVITAS-VIVALDI and MIDAS projects. In ARCHIMEDES, Aalborg aims to build on this work, tackling innovative subjects and combining with what has been learned from other cities in Europe. The result is an increased understanding and experience, in order to then share with other Leading cities and Learning cities.

Aalborg has recently expanded its size by the inclusion of neighbouring municipalities outside the peri-urban fringe. The Municipality of Aalborg has a population of some 194,149, and the urban area a population of some 121,540. The ARCHIMEDES corridor runs from the city centre to the eastern urban areas of the municipality and forms an ideal trial area for demonstrating how to deal with traffic and mobility issues in inner urban areas and outskirts of the municipality. University faculties are situated at 3 sites in the corridor (including the main university site). The area covers about 53 square kilometres, which is approximately 5 % of the total area of the municipality of Aalborg. The innovation corridor includes different aspects of transport in the urban environment, including schools, public transport, commuting, goods distribution and traffic safety. The implementation of measures and tools fit into the framework of the urban transport Plan adopted by the Municipality.

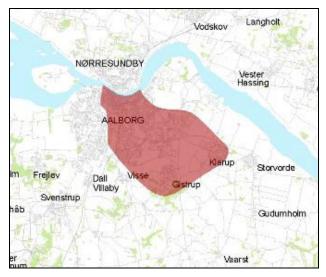


Figure 1: The ARCHIMEDES corridor in Aalborg

## 3. Background to the Deliverable

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By implementing a City Bike Scheme Aalborg wants to demonstrate the importance of sharing urban space from an environmental approach and offer a real alternative mode of transport in the ARCHIMEDES innovation corridor for the residents, commuters and visitors.

The main aim is to stimulate the use of bicycles on short trips within the city and attract users that have not previously used bicycles as their preferred means of transportation.





This deliverable provides information regarding the implementation of Task 6.2.

#### 3.1 Summary Description of the Task

Aalborg has implemented a City Bike Scheme inside the ARCHIMEDES corridor. This task included purchase of City Bikes and City Bike Stations and entering a long term contract for operation of the scheme. The task has included an information campaign, an opening event combined with an ARCHIMEDES dissemination event, and a City Bike Internet Site.

## 4. City Bike scheme in Aalborg

#### 4.1 Description of the work done

The City Bike Scheme is implemented within the ARCHIMEDES corridor. The scheme consists of 125 City Bikes and 17 City Bikes Stations within the ARCHIMEDES corridor supplemented by 12 City Bikes and two City Bike Stations located outside the ARCHIMEDES corridor.

As part of the planning process different potential user groups were considered, as different user groups need different cycle types and different type of deposits systems.

It was decided to implement a High Class City Bike scheme, - within the limitations set by tamper proofing and economy, - to attract users, so the system would be intensively used. At the same time it was the expectation that a high class product, well maintained, would minimize vandalism.

The size of each City Bike Station is designed according to expected use – from 6 bikes to 20 bikes pr station. The bike stand is in modules of 2 bikes, to make this possible and to facilitate an easy adjustment to future need and to urban space.





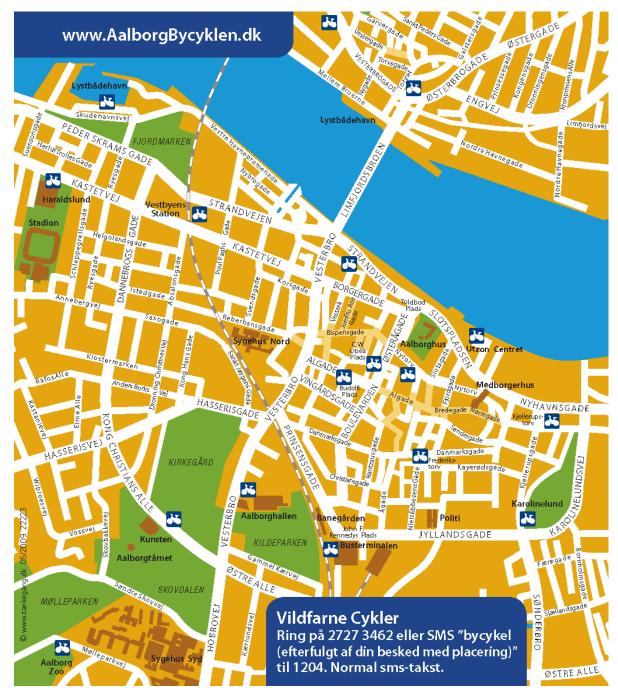


Figure 2: Map showing the location of the City Bike stations in the ARCHIMEDES corridor in Aalborg

The City Bike stations are located in the ARCHIMEDES corridor near changing points to Public Traffic, educational institutions, tourist attractions and other locations that attract people. The City Bike stations are located at visible places in the streets so the bikes are easy accessible.





#### 4.1.1 Equipment:

Bike: It was decided to go for a relatively strong and tamperproof bicycle as the city centre can be a tough environment. But at the same time we wanted to offer a lighter City Bike than usually seen, and a bicycle with more equipment than usually.

As we didn't want to invent a City Bikes from scratch but wanted the bicycle to be built on the experiences from other City Bike systems, the contract for bicycles was placed at an experienced City Bike supplier.

As the first City Bike in Denmark the Aalborg bike was build with an aluminium frame as opposed to the usual iron frame. This reduced the weight of the frame by 3-4 kg. The bicycle was equipped with 3 gears, 2 brakes, lights and a handlebar basket. Additionally a decision was made to go for spoke wheels rather than plate wheels. Taken together this made it a light, comfortable and secure cycle.



Figure 3: The Aalborg City Bike





Bicycle Stands: For the bike stations a new stand has been designed. The stand was designed according to traditional Nordic design traditions in stainless steel, and the design incorporates experiences from Copenhagen and Aarhus, especially concerning size and dimensions of material.

The stand is a module with room for two bikes. The top of stand shows the City Bike logo to avoid mix-up with ordinary bike stands. On a version of the stand the logo part is increased in height and supplemented with the text 'City Bikes' to form a pylon.

Each City Bike station is composed of one of the high pylons to make the station visible in the street supplemented with two or more of the stands in normal height.



Figure 4: The Aalborg City Bike





Deposit system: In order to motivate users to return the cycle to the stations the cycle is locked to the stand with a coin lock, and can be released by the deposit of a 20 DKK coin. The coin is returned when the cycle is returned to any of the City Bike stations.



Figure 5 (Prototype picture not final implementation)

#### 4.1.2 Maintenance and Operation of City Bike Scheme

A contract has been signed with a private company for the maintenance and operation of the City Bike Scheme.

This includes daily inspection and cleaning of the City Bike stations. Inspection and repair of minor errors on the bikes in the stations, repair of major errors on repair shop within 72 hours, and redistribution of cycles between stations once a day. In the winter all bicycles go through a major maintenance check.

Again, it has been the stipulation that a high class, well maintained system will lead to more use and less vandalism.

A potential problem in City Bike schemes is users not being able to use the system because of empty City Bike stations due to users not returning the bikes. The deposit system is intended for minimising this problem. But it must be anticipated that some bikes are left in parks or bike sheds in spite of this. It is a part of the operation contract that the company collects these bikes every day.

Motivating citizens to report 'lost bikes' is an important task, and to make reporting easy the Aalborg City Bike has a reporting formulary on the City Bike home page, a SMS shortnumber services and an automatic telephone answering service.

#### 4.1.3 Sponsor Contract and Image

Often City Bike schemes are partly financed by advertising on the bikes – usually on plate wheels. Although co-financing from advertising is often a prerequisite for having a City Bike scheme at all, heavy use of advertising on the bikes and use of plate wheels undermines the image of a high class system. In addition, plate wheels make the bike heavy and uncomfortable to drive.

In Aalborg we have been able to sign one major – and long-term - sponsor contract with the Power Supplier, saying that the company will not have commercials on the wheels but instead have its images connected to the City Bike system and the company logo on the frame of the bikes. In this way it is possible to avoid the plate wheels and to keep the high class image.





#### 4.1.4. Partnership

Throughout the process from the start of planning to implementation the project has had great benefit from organising the process via an informal external steering committee between the local retail organisation, the power supplier (the sponsor) and the municipality.

Among other benefits from this process it was possible to hold a better and bigger start event than planned because the partners in the steering committee offered to finance some parts that would not have been possible inside the formal ARCHIMEDES budget.

#### 4.2 Communication

The City Bike scheme has been the one measure attracting most public attention from press and citizen in Aalborg. Throughout the planning process, during implementation and in the operating period there has been intense press coverage in the papers and on TV and radio.

# I dag ruller bycyklerne

TRANSPORT: Aalborg tilbyder en ny generation af bycykler, der er lettere og med mere udstyr end i andre byer

ren. - Vi har valgt at lave en god

Manore: Pra i dag er der 135
grafst transportmuligheder
song transportmuligheder
song transport muligheder
song transport song song
song transport song song song
song transport song song song
song transport song trans

cente gemplevatennye cykel i håb om, at der så er mange, der vil bruge dem. Vi har et lidt optimistisk håb om, at hvis vi tilbyder folke te godt produkt, så passer man godt på det, siger projekte-deren, der peger på, at stra-tegien andre steder har vær-ert, at lave en tung havelåge, som ingen ville stjæle.

KELSTATIONER findes på Banegården, busterminalen, ne Kelstationer findes på Banegården, busterminalen, ne Kunsten, Aalborg Zoo, Aalborg Kongres & Kultur Cent ammeltory, Karolinelund, Nordkraft, Frederikstory, Vesti iter, Utzon Centret, havne

Aalborg Kommune har lavet en driftsaftale med AFA
JCDecaux om at vedligeholde gyklerne. De bliver tilset hver dag og repareret, hvis der er fejl.

De har en mand, der korer rundt og tilser de 19 cykelstationer hver dag.
Hvis det kan lade sig gøre, bliver cyklerne repareret på

med ut på værstedet på Thistedvej - De skal hele tiden være i orden, og det er igen filosofi-en, at hvis borgerne hele ti-den møder en cykel, der er i orden, så passer man bedre på den.
Desuden skal AFA JCDe-

Desuden skal AFA JCDe-caux sorger for, at cyklerme en gang i degnet er jævnt fordelt på stationerne - Dels skal du være sikker på, at du kan få en bycykel, når du kommer ned på sta-tionen, men du skal også være sikker på, at hvis du vil aflevere bycyklen og have din tyver igen, at der er plads til at sætte den.

esonen for bycyklerne er 1. 1. november, hvorefter cyklerne får den store tur i terhiet.



gen af cyklen meger tingere om vinteren.
Vattenfall er sponsor for bycyklerne og betaler 37 procent af ordningen. Effer tre år har virksomheden en option på, at de kan fortsætte sponsoratet. Andre steder har mange sponsorater i øvrigt gjort cyklen tungere, fordti der reklameres på en plads på hjulet, men 1 Aalborg er der altså kun én sponsor.

#### FAKTA

135 BYCYKLER VENTER ■ De 135 bycykler holder på 19 stationer med i alt 160 by-cykelpladser.

## cyklerne at være ude om vin-teren, sk omkostningerne vil-sige, for det ander er bru-gen af cyklen meget ringere og tjen en tyver

BYCYKEL: Depositum på 20 kr. skal sikre, at cyklerne kommer tilbage på de 19 stationer

nen indført et depositum på 20 kr., som man putter i cyk-len, når man den på en cy-kelstation. Menten får man igen, når cyklen stilles. Hvis der ikke er et deposi-tum, så vil bycyklerne bare blive som:

på de 19 stationer

Al Jesper Schouenborg

jesperschauenborg

jespersc

rer selv til, at folk, der find en bycykolumi.

### Cyklerne fejres

AMBORG: I bedste truckerstil vil samtlige 135 bycykler kore i konvoj gennem byen i her til formiddiag, nit bykjedstordningen indivies.
Politier fører an i partin indivies.
Systellyndine. Desente vil ("J står for." and Martari mand Martari men i der begynder fra Toldbod i systellyndine. Desente vil ("J står for." and "J står f

Figure 5: Press Coverage of the Aalborg City Bike Scheme





To have two more channels of communication to the citizens and to the users, the project launched the City Bike home page www.AalborgBycyklen.dk, with among other functions, a Google Map function for finding the City Bike stations - and founded the Facebook group "Aalborg Bycyklen / Aalborg City Bikes"

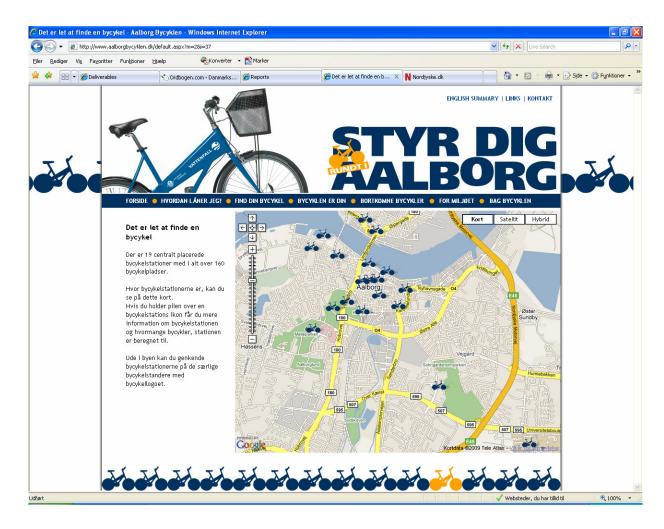


Figure 6: Homepage of the Aalborg City Bike Scheme

In all media we have tried to focus on three messages:

"The City Bikes belong to all of us - please take good care of them so they are ready for use next time."

"Remember that you have to return the bike to a City Bike Station after use". And

"Tell us if you know of a lost City Bike. We will fetch it so it's ready for your use next time you need a City Bike."





At the  $4^{\text{th}}$  of July a big event was held to welcome the City Bikes to Aalborg. At the same time the event was used as a dissemination event for ARCHIMEDES where the project and key measures were presented.



Figure 7: Launch of the Aalborg City Bike Scheme

To introduce the City Bike system a folder has been composed. The folder was distributed at the launch event, and is now being handed out at tourist offices etc.







Figure 8: Launch Leaflet for the Aalborg City Bike Scheme

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The system was presented in full-page newspaper advertisement sponsored by the retail organisations,



Figure 9: Newspaper Advertisement for the Aalborg City Bike Scheme and on 1,75 meter high posters in all bus stops etc.



Figure 10: Bus Stop Advertising for the Aalborg City Bike Scheme





As part of the Start Event a video was taken and a short version were produced and uploaded to Youtube.

http://www.youtube.com/watch?v=zaAAO0nE0 g

The movie was integrated as a newsflash on <a href="www.AalborgBycyklen.dk">www.AalborgBycyklen.dk</a> and on the Face-book group to create a feeling of sense of community between the City Bike users.



Figure 11: Online Coverage of the Aalborg City Bike Scheme

#### 4.3 Problems identified

So far the design and quality of the bike and the stations have been satisfactory.

But the bikes are used very heavily, and the tendency to 'privatise' the bikes is so big that it can be a problem to find bikes at the stations. This is mitigated by information efforts and by cooperation with porters and waste collector in reporting 'lost bikes'







Figure 12: Information folder for porters and waste collectors

#### 4.4 Future Plans

In the rest of the project period the system will be kept operational. Bikes and stations will be maintained and the number of bikes will be supplemented to compensate for lost bikes.

The success with the City Bikes insides the ARCHIMEDES corridor implies that the system should be extended to the rest of the city. This will require a doubling or tripling of the numbers of bikes outside the ARCHIMEDES budget. Whether this is possible is a political decision that has to await evaluation of the present system.