



CIVITAS MIMOSA

BOLOGNA • FUNCHAL • GDANSK • TALLINN • UTRECHT



Innovative cities

Before and after CIVITAS

Civitas



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Published on behalf of CIVITAS MIMOSA by

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Printed on 170g FSC Certified paper from a sustainable source

The CIVITAS Initiative is co-funded by the Energy and Transport parts of the EU's RTD Framework

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After more than four years of hard work the CIVITAS MIMOSA project is coming to an end. The Municipality of Bologna is extremely proud to have coordinated the project and would like to thank all the people who played a part at both the city and European levels.

During this time, we have remained committed to the MIMOSA guiding principle of shaping a new mobility mentality with a range of truly innovative and integrated measures that target and challenge local authorities, transport operators, private companies and citizens. The time and resources spent by the whole consortium have been very fruitful, with most measures achieving their initial ambitions. In many cases, they have exceeded expectations within the project and beyond, with measure transfer and upscaling already occurring.

Strong political commitment from our proactive, political representatives has been instrumental in the overall acceptance and smooth implementation of the measures. The connections made, the challenges experienced, and the knowledge shared have strengthened the consortium.

Even the economic crisis has made the cities more determined than ever to maintain and build on what they have achieved under CIVITAS. Having seen the environmental and financial benefits of this approach they are now confidently working on long-term sustainable urban mobility plans and actions that will see their inhabitants and businesses live, work, move about and play in cleaner, better cities.

Together, the cities of Bologna, Funchal, Gdansk, Tallinn and Utrecht have proved that a synergy of integrative and participatory actions can achieve a more significant effect on urban mobility than the sum of isolated actions carried out by each player.

Mr. Andrea Colombo,
*Deputy Mayor for Traffic and Mobility,
Municipality of Bologna*



Congratulations to the cities of Bologna, Funchal, Gdansk, Tallinn and Utrecht!

For these partner cities, CIVITAS MIMOSA represented an instrument of modernisation, where each municipality directly benefited from the development of new technologies which would have been impossible to adopt without the European financial assistance of the CIVITAS Initiative. Already we're closer to achieving our common goal of more sustainable and efficient cities with a better quality of life.

The CIVITAS Initiative gave the cities the chance to apply the most appropriate tools to promote innovation, study best practices in the field of sustainable urban mobility and avoid mistakes of the past. In this way the European Commission plays a fundamental role in ensuring the long-term future of this strategy as the promoter of overall European funding programmes.

I would sincerely like to congratulate each and every member of the CIVITAS MIMOSA family — including project officers, politicians and technicians — for all their dedication and hard work during the last four years. I'm sure our achievements will persist and will continue to be an inspirational example for other small and medium cities around the world. Our success to date has been proved by the growing number of cities that have expressed their desire to join the CIVITAS Initiative. This is recognition of the importance and relevance of sustainable mobility in Europe.

Mr. Bruno Pereira,
*Chairman of PAC
and Deputy Mayor of Funchal*



Introduction



MIMOSA Cities Now Moving to a Better Beat!



The five cities of CIVITAS MIMOSA have diverse physical, climatic and cultural conditions across a geography stretching from the Baltic northeast to the distant Atlantic southwest. Despite this vast spatial spread, Bologna, Funchal, Gdansk, Tallinn and Utrecht were bound together by a fundamental appreciation of the problems to be tackled in their cities, the instruments to be used, and the objectives to be attained. “*Learn how to move better, to live in better cities*” is the driving force behind all 69 measures, a driving force that had the ambition to adopt an integrated technological, infrastructural and citizen-engagement approach to shape a new citizen mentality, whereby conscientious travel behaviour would be deemed a reward as opposed to a sacrifice. Achieving this radical change in urban mobility culture and citizens’ habits meant making communication and innovation a pillar of our strategy.

Now, four years on, the results are there for all to see: Bologna is already well on its way to creating a pedestrianised city centre with increasing numbers choosing to take the bus and cycle. Funchal, through its creative public events, has encouraged its citizens to use active and public transport, as well as cleaner vehicles. On a commercial level, many hotels and tourists visiting Funchal now opt to take the “green” bus as opposed to hospitality buses and taxis. Gdansk has succeeded in engaging citizens in its bike weekends, as well as encouraging more use of the tram, while children and parents are once again walking to school. Utrecht has tackled freight — one of the major causes of its congestion and pollution — by implementing the highly effective Beerboat and Cargohopper. Finally, Tallinn has made significant progress in improving the quality and image of its public transport with an invigorated cycling culture now part of the city’s landscape.

Five cities, each with their own success stories. Yet any success has been down to participation in public and private partnerships. This has proved crucial to all, even though engaging with stakeholders has seen different approaches in different cities. Tallinn aimed for in-depth understanding of the behaviour and motivations of its citizens. Utrecht, with a strong track record in participation, took it to an advanced level. Gdansk, on the other hand, had to find a way forward in a post-communist society still adapting to the idea of conducting discussions with stakeholders. However, the city’s persistence in the use of social media, as well as frequent liaison with civil society organisations, won the day. Lastly, Bologna and Funchal, with political backing and an openness towards change, forged ahead with many successes of their own.

Welcome to

BOLOGNA

Italy



The splendid city of Bologna is the capital of the Emilia Romagna region. And as Italy's seventh largest city, Bologna's position as a vital traffic hub in the national transport network is without question. The city itself has about 380,000 inhabitants while the wider metropolitan area has nearly 1 million.

With a Medieval historic centre characterised by narrow, labyrinthine streets, famous arcades and porticoed buildings, Bologna struggles to balance its rich cultural heritage with the transport requirements of the 21st century. Add 100,000 students from the city's historic university to the mix and the pressures become clear. In fact, its 2 million urban journeys per year already take a toll on the limited city centre road space and pollution is becoming a serious issue.

In light of this, and prior to its participation in CIVITAS Plus, Bologna adopted its Urban Traffic Master Plan, a strategy designed to mitigate the negative effects of traffic congestion, air pollution and road accidents. The guidelines of this strategy were based on promoting and supporting sustainable mobility. Having made a good start, the city wanted to build on its initial success by joining the CIVITAS family and piloting several integrated

and truly innovative solutions for mobility. Indeed, Bologna's role as project coordinator of CIVITAS MIMOSA represents a significant commitment to its ambitious strategy of creating a greener Bologna through cleaner and better transport.

To achieve its objectives Bologna concentrated its initiatives in a specific area of the historic part of the city designated as an LTZ (limited traffic zone). The area's limited capacity for traffic flow and parking had contributed to serious congestion issues, as well as negatively impacting on the quality of life of citizens. The LTZ was a perfect platform to progressively introduce technological, infrastructural and communication measures in tandem with traffic restrictions to better manage and control traffic in the city, improve road safety and increase public transport users.



Ambitions



Bologna's ambitious strategy to create a greener city foresaw a radical change in behaviour that required a new mentality for all its citizens and much of its success depended on the active participation of the population. For that reason, the primary ambition was to raise awareness of sustainable mobility. A key element in achieving this was initiating marketing and communication campaigns in tandem with the design and implementation of the mobility measures. With this in mind, the city planned an ambitious programme of meetings, workshops, events and road shows to inform citizens, stakeholders and relevant associations. These annual events were the perfect platform to actively engage citizens: encouraging them to participate in helping the city evaluate the impacts of its measures and providing invaluable input for future planning. The ambition was that thousands would engage in these events, generating an enthusiastic response, particularly from children and cyclists, as well as ensuring positive media coverage of both sustainable mobility and the CIVITAS Initiative.

Another innovative ambition was to use ITS to improve mobility management and planning. A key component of this was developing digital communications to ensure citizens have easier access to sustainable mobility and in turn encourage behaviour change. To this end, it was crucial to form partnerships with relevant organisations to generate real-time traffic reports and information via various digital platforms. It was hoped that these lines of communication would be utilised increasingly by the public.

Challenges encountered

In implementing Bologna's new strategy, with its focus on the LTZ, two key issues arose. First was the need to integrate measures to avoid overlap and conflict between them. The second was the realisation of a need to actively engage citizens and stakeholders in accepting the often restrictive nature of the measures. Another key challenge was to get things right from the very beginning. We set ourselves a challenge to draw key learnings from this experience: to improve our capabilities in measure implementation, gathering crucial data for future planning, and finding ways to harness acceptance from citizens and stakeholders. The CIVITAS MIMOSA projects presented the city with a valuable opportunity to achieve this aim, developing an integrated

Spotlight

Encouraging Cleaner Vehicle Use – Makes a Real Difference

The integration of financial incentives, restricted access and accurately targeted communications proved highly effective in encouraging the replacement of private fleets with cleaner alternatives. These included:

- > **Financial incentives** such as grants for switching to new environmentally friendly engines;
- > **Exemptions from the city's** seasonal traffic restrictions, as well as parking discounts and circulation facilities in favour of cleaner vehicles;
- > **Dedicated informative** communication campaigns directed at citizens and car drivers.



Such was the effectiveness of these measures that approximately 15 percent of all cars now circulating in Bologna are powered by compressed natural gas (CNG) or liquefied petroleum gas (LPG). With the European target set at 10 percent, and the share at a national level just 5 percent, this represents significant and real success for CIVITAS MIMOSA in Bologna.

and comprehensive framework for implementation that took account of existing measures. The project also established a structure for research and helped advance and evaluate appropriate guidelines for marketing and communication campaigns related to the measures.

Looking forward, the main challenge will be the negative effects of the European economic crisis and its potential impact on the activities of the local administration. Unfortunately, these effects are already being felt. However, one benefit is that it provides us with the opportunity to evaluate and introduce cheaper and more innovative solutions, without losing sight of our objectives and the desired outcome: a greener Bologna. In fact, the evaluation results from the current MIMOSA pilot projects will empower politicians and administration officials in the future on how best to utilise restricted finances to make cleaner and better transport services.



Innovative solutions

The 19 measures undertaken in Bologna cover all eight CIVITAS themes, with innovation at the heart of all of them. From 2006-2011, MIMOSA measures have helped contribute to an improved air quality with figures showing a decrease of -26 percent in PM2.5 and -18 percent PM10 within the city centre. In the narrow streets of the LTZ, illegal on-street parking would often hinder traffic flow and public transport. Naturally, this was one of the first problems to be addressed and was done using an innovative ITS solution: mobile cameras that detect illegal parking via an automatic number plate recognition (ANPR) system. Initial results indicated improved timekeeping for public transport and a massive 68 percent reduction in fines within just a two-year period.



Another innovative ITS solution was the STARS system, which monitors obedience of traffic lights. This solution involves cameras connected to inductive loops under the road surface that are activated when the traffic lights turn red. Again the results were highly impressive, with the system contributing to a 45 percent reduction in the accident and serious injury rate at the 16 intersections where STARS was deployed. Of the 20,000 driving license penalties issued, the number of legitimate legal appeals was only 400.

Another example of great innovation is MobiMart: a soft measure that rewards citizens for behaviour change whether they're cycling, taking public transport, car sharing or car pooling. Based on the Kyoto incentive mechanism for pollution emissions, MobiMart illustrates that behaviour change incentives can be very effective, but only if supplemented by enforcement of tariffs and vigorous promotional and advertising campaign that communicates a "shared" vision with subscribers. In the latter case, the Bologna Cycle GPS Challenge mechanism was hugely stimulating; allowing participants to feel they were part of a community in action and doing something positive for sustainable mobility.



Scaling up

Bologna is keen to reaffirm its position as a hub for innovation in mobility management, and it's a direction that it wishes to continue long into the future. In terms of innovative solutions for cleaner vehicles, a remarkable study has been conducted to boost the development of a highly environmentally sustainable and cost-effective bus fleet. The hybrid engine has presented itself as the best solution for Bologna and a test is ongoing to evaluate its concrete benefits.

On the softer side, MobiMart serves as a model for the design, prototyping and demonstration of mobility eco-savings aimed at citizens. With results demonstrating a staggering rise in bike usage, many cities are looking to Bologna to find out exactly how to replicate this widely acceptable

certification method for mileage savings, resource use, emissions reduction, etc. In response, Bologna developed the 2012 European Cycle Challenge enlisting at least 10 other European cities to participate. During the May Challenge over 1,100 citizens from Bologna took part in swapping the car for the bike for four weeks - resulting in 90,000 kms and a saving of 20 tonnes of z emissions. Other European cities can now apply the already tried and tested formula, enjoying the benefits without the risk and set-up investment outlay.

The MIMOSA T-Days Initiative is now being extended to form the consultancy basis for Bologna's ambitious document entitled "Plan for Pedestrian Areas". Fieldwork will include specific workshops and meetings with the participation of relevant associations, organisations and institutions, as well as the general public.

Spotlight What are T-Days?

In September 2011, the Municipality of Bologna organised an extraordinary event called "T-Days", a weekend of events for cyclists and pedestrians. It combined two measures: restrictions and mobility marketing. For the first time in Bologna's recent history, part of the LTZ was completely closed to motorised traffic for two full days. Instead, the roads were open to a wide variety of organised activities that promoted both innovative and traditional services while providing opportunities to practice sustainable travel.



T-Days demonstrated to citizens and visitors a new way to experience a wealth of culture, shopping, sports and eco-sustainable events within the city's historical centre. Media and newspapers estimated that during T-Days, about 60,000 people circulated freely on foot in the streets; perusing shop fronts; appreciating monuments in the city squares; and savouring the city's boutiques, museums and street markets: in essence discovering Bologna in a whole new light. Online, citizens also engaged with the project: taking part in a contest for the most interesting and original blog or webpost about the event across all social networks. The huge success of the initiative and the feedback and requests from participants convinced the local administration to repeat the event. A second T-Days has already been held on 3-4 December, 2011 and since May, 2012 the T-Days takes place in Bologna every weekend and public holiday. Naturally, it's a concept that is also easily transferable to other historic cities. And if it's even half as successful as Bologna's T-Days it will be an amazing few days.

Future vision

So, what has Bologna learned? Well, the main lesson is that citizen and stakeholder collaboration is absolutely essential when introducing and achieving successful measures. The city now aspires to maintain and increase involvement not just in one-off measures, but in wider reaching integrated mobility management frameworks long into the future. Having embarked on the first steps of an ambitious Urban Traffic Master Plan prior to joining the CIVITAS family, Bologna is now set to go even further and forge new standards in how historic cities can get to grips with innovations in technology, communications and demand management to really make a difference in the quality of the everyday life of its citizens.



Through networks established under the CIVITAS framework at the city and regional levels with stakeholders, nationally via collaboration with CIVINET Italy and on an international level via CIVITAS, the city administration is ready to listen, adapt and work to ensure Bologna continues to champion ITS and citizen-based sustainable mobility. Nowhere is there more evident than in Bologna's new plan for its pedestrian area, entitled "A City Centre Again". Its implementation, supported by both political and citizen groups, will be crucial in making Bologna a greener city than before CIVITAS. Winning the European Mobility Week 2011 Award testifies that Bologna is certainly on the right track to becoming a greener city. European Commissioner for the Environment Janez Potočnik remarked: "Bologna has found creative ways to permanently make its transport infrastructure more sustainable. I hope they will inspire other cities to do the same." Well, we will certainly try!



Political Backing for Future Pedestrian Plan Arising from MIMOSA Projects

Following on from the Spring 2012 citizen engagement consultations under the measure A City Centre Again, Bologna is already implementing its ambitious new pedestrian area plan. The program foresees three different interventions in the city centre:

- > A large, highly pedestrianised area within the LTZ where walking and cycling will be given priority over motorised traffic;
- > A "T" area: This will involve the three main streets, with access being closed to private vehicles; and
- > Pedestrian and cyclist only zones in certain squares and streets.



According to Deputy Mayor for Traffic and Mobility in the City of Bologna Andrea Colombo, "It is a plan combining quality of life with accessibility and freedom of movement, taking into account the good practices and lessons learned during CIVITAS MIMOSA." And rest assured that the city administration will work hand in hand with associations, institutions and citizens to make it a reality.



Welcome to

FUNCHAL

Portugal



Funchal is the capital and commercial centre of Madeira, a Portuguese archipelago with a population of 245,000. A modern, cosmopolitan city, Funchal is 75 km² in size and is home to 104,000 of the islands' inhabitants. However, Madeira's most notable statistic is that currently tourism provides 20 percent of the region's gross domestic product.

With tourism such a major economic driver on the islands, each season sees an influx of tourists from around the world that increases pressure on a city that already has a high population density. Whilst the city freeway, at an altitude of 200 metres, allows easy passage from east to west without interfering with central urban traffic, the city centre roads are extremely steep, narrow and winding. Understandably, this makes public transport service difficult and complicated, making the car the preferred option. Madeira has about 110,000 vehicles in circulation: 1,136 paid, metered parking spaces; 560 residential buildings; 460 spaces for loading; and 9,500 spaces in paid parking facilities; and a fleet of 495 taxis.

The public transport service, totalling of 62 routes, covers 180km of road. Currently 144,000 trips are

carried out daily, transporting a total of 30 million passengers a year.

Prior to CIVITAS MIMOSA, Funchal concluded a mobility study to better understand the local mobility situation and trends and to define future measures and policies. In recent years, streets have been progressively pedestrianised and closed to traffic in the historic centre helping to reduce downtown traffic flow significantly. Coastal promenades have also been built to promote pedestrian mobility and leisure activities. Funchal eagerly participated in the CIVITAS MIMOSA project to build further on the above mobility measures, as well as focus on changing citizens' behaviour and creating a tourist destination with a unique sustainable mobility culture. The city has already achieved much, with more yet to come.

Ambitions

Funchal's overall aim was to reduce energy consumption and pollutant emissions in the transport sector and improve urban mobility. To ensure success, the city was keen to use the opportunity provided by CIVITAS to introduce measures that would contribute to new mobility habits and attitudes by combining technological innovation with behaviour-change campaigns. A central objective was to demonstrate that improvements to the urban mobility system can benefit both tourists and citizens. With



this in mind, Funchal planned to introduce new “green lines” for tourist buses, launch an electric bike and scooter service, and encourage large scale eco-driving. It also aimed to encourage the uptake of cleaner vehicles in public and in private fleets. Success would depend on engagement of citizens and tourist-dependent businesses, especially hotels.



In Madeira, cycling is uncommon due to the hilly landscape. So, within the scope of CIVITAS MIMOSA, Funchal wanted to demonstrate that cycling was possible on the island, as well as test and evaluate the idea of an intermodal line using bus and bike. This approach allowed citizens to combine both modes of transport, which in turn promoted exercise and the use of sustainable transport modes. Above all, our main ambition was to participate, share experiences and learn from our European partners. MIMOSA offered a unique opportunity to discuss very important issues for the future of Funchal and for Europe in general, and the city was keen to capitalise on this prospect.

Challenges encountered

The rugged topography of the island and the dispersed nature of the settlements meant that Funchal had very particular and difficult challenges to overcome in implementing sustainable mobility measures. The mountainous landscape puts additional strain on public transport vehicles, resulting in shorter life spans. Fleet maintenance and renewal is crucial but difficult due to the isolation of the island. Also, electric vehicles do not perform well under these conditions so the challenge was to find a sustainable solution using alternative fuels and energy-efficient vehicles.



While the topography of the island cannot be altered, mentalities could be, so changing mindsets was something that could be tackled to achieve a better socio-economic and environmental balance. Communications were targeted at both citizens and tourists, so that they could understand that their behaviour and attitudes can make a difference. Social media and interactive events were at the heart of this engagement. However, it was often found that implementing infrastructural measures — such as making the 4.5 km historic area of Funchal pedestrian-only (and at the same time placating the commercial sector) — were easier to implement than shifting the mindset of citizens.

Spotlight The Green Tariff on Electric and Hybrid Vehicles

With few electric and hybrid vehicles circulating in the region, Funchal implemented a series of measures to foster a positive attitude towards cleaner transport and encourage the uptake of greener vehicles. Part one involved the Green Tariff: a 50 percent discount on parking fees to owners of electric or hybrid vehicles. The second part involved a series of awareness raising campaigns including conferences and exhibitions of less polluting vehicles. July 2012 results show that the Green Tariff has been availed of more than 800 times.



During the first half of 2012, there were 484 users surpassing combined totals for 2010 (37) and 2011 (335). Furthermore, the Green Tariff has been positively accepted by the citizens. Two surveys conducted in 2010 and in 2011 assessed how useful citizens found the tariff. Positive responses increased by 20.8 percent year on year (35 percent to 55.8 percent). Funchal expects that this measure will increase the number of greener vehicles in the city by the end of the project, which will then lower pollutant and noise emissions. This will have positive effects on the overall quality of life in the city.

A further challenge, facing Portugal (and Europe as a whole), is the financial short-falls and the related rising costs and availability issues surrounding fuel and energy. And with these problems already taking hold it may be necessary to rationalise transport due to unsustainable financial costs for companies and public transport in particular.



Innovative solutions

Because of Funchal's dependence on tourism, and its effect on the island, the city's focus was on developing green solutions in the area of tourist mobility. Innovative measures include:

- > A "Tourist Mobility Kit" consisting of personalised tickets, maps, and guides for hotels and tourists to encourage them to use the green bus line rather than hotel courtesy buses. More than 5,000 kits were sold in 2011
- > A recognition award for hotels that promote the tourist kit: 17 hotels have participated, providing a total of almost 28,000 passengers.
- > A new web and GPS-based walking guide for tourist attractions.



Other innovative measures include the Bus and Bike service, a unique solution for hilly or mountainous areas. In this case, Funchal combined both modes of transport so citizens could use their bikes to travel down into Funchal and bring them back home on the bus, avoiding the steep climb. Another innovative measure is Dial & Ride, Funchal's new accessibility service, and an inspired way to provide public transport services to the dispersed population in isolated, hilly areas, particularly those with limited mobility. Finally, Funchal's use of social media to engage citizens was an unforeseen solution and an unexpected success in raising awareness of CIVITAS MIMOSA measures amongst the public and the media: CIVITAS Funchal's Facebook page has over 800 friends.

Scaling up



Developing public transport in an era defined by budget constraints is certainly a challenge for both transport practitioners and politicians in any country. And a study of "over-costs" that peripheral regions have to incur to provide regular public transport services uncovered information that was helpful in the city's efforts to scale up measures. Widespread dissemination of the study's results to Europe's outermost regions would be extremely beneficial in helping them to manage public transport "over-costs" correctly, and sustain accessibility for their citizens.

Several measures in Funchal could be extended beyond the city's borders. Initiatives such as Public Transport on Demand can address emerging accessibility challenges in other regions of Madeira, Portugal and indeed Europe, where the demand is too low for a conventional public transport scheme.

Funchal has also developed interesting initiatives to alleviate peak period tourist congestion and improve tourist mobility, ideas that can easily be adopted by other regions where tourism plays a role in the local economy. The "Tourist Kit", together with a high quality public transport service along tourist corridors is a bonus for any resort city aiming to nurture green habits among visitors and locals alike. Building on the success of this sustainable mobility information package for visitors, further micro actions emerged. An example was the installation of multimedia kiosks along the corridor with Bluetooth antennas sending real time information about public transport as people approach a bus stop.

Future vision

What does the future hold for Funchal? The city has demonstrated, through participation in CIVITAS, that it is possible to integrate the political agenda with sustainable urban mobility. Deputy Mayor Bruno Pereira is dedicated to improving the quality of mobility in Funchal and participates in the EU Covenant of Mayors, a political platform to rationalise energy use. Working with citizens and stakeholders, the aim is to reduce CO2 emissions by 20 percent by 2020.



While the economic crisis facing Portugal and other European countries has put pressure on budgets, it also offers a “window of opportunity” to bring about a change in attitude and get more people to use value for money public transport. Beyond 2012, Funchal looks forward to taking up concrete cost-effective policies that result in an enduring integrated approach. New Infrastructure initiatives and incentives that can help leverage new projects are already underway as a result of the evidence-based research and progress made under CIVITAS. Modernisation of the Horários do Funchal (HF) bus fleet looks set to continue with support from the regional Intervir+ ERDF programme, which granted HF the prestigious RegioStars award on “Integrated Clean Urban Transport”.

It is the municipality’s aim to follow a sustainable mobility plan that keeps Funchal a competitive destination. A number of new strategic environmental projects are developed to make ecotourism a keystone policy for Madeira. In particular, the focus will be on energy-efficient transport for leisure travel, increasing awareness and changing mobility behaviour among visitors and locals. For Madeira and its wonderful climate, it’s good to be able to say that the future really is looking bright.



Urban Orienteering – Behaviour Change At It’s Best

Launched in CIVITAS MIMOSA’s first year, the orienteering competition has proved a hugely popular event with the citizens of Funchal. It is a wonderfully simple initiative that takes place during the annual European Mobility Week. Citizens of all ages and backgrounds sporting sustainable mobility themed T-shirts take to the streets of the city by foot and public transport in their bid to be crowned Funchal’s Most Sustainable Citizen.



Opening up new ways of getting around the city, the competition showcases public transport as a friendly and convenient transport mode. Those who don’t use the public transport service are challenged to give it a go, whilst those who are already advocates are tested on new routes, giving them an insight into how quick and useful it can be to travel to other parts of the city.

The orienteering experience also encourages participants to rediscover by foot the great historical and cultural landmarks of Funchal and to learn about the health and environmental benefits of walking to work every day. The fun ends with orienteering contestants having the opportunity to win a number of mobility-related prizes. Over the course of the project, seven events were held with over 1,000 people taking part.



Welcome to

GDANSK

Poland



Strategic, historic and vibrant, Gdansk is a fascinating city. As well as being Poland's principal seaport and one of the Baltic Sea's main international transport hubs, Gdansk is home to a population of nearly 500,000 people, making it the largest city in northern Poland. Gdansk also holds the title of being the largest city in the Tri-City Metropolitan Area, which also includes the cities of Gdynia and Sopot.

For many years Gdansk has been one of Poland's most attractive and successful tourist destinations, with its ornate streets contrasting starkly with its dramatic industrial port architecture. When you consider its rich and eventful history this comes as no surprise. Gdansk is a city that has felt the influence of German and Communist rule. Renowned as the birthplace of the Solidarity movement, of which Lech Walesa was at the heart, the city's geopolitical activities in the 1980s and 1990s sowed the first seeds that would end in the fall of communism in Poland.

However, 50 years of communism has left an indelible mark to this day; most notably on the city's inefficient public transport (PT) system. This, in conjunction with the recent trend of people locating in the suburbs, has significantly increased the pressure on every element of Gdansk's transport and road infrastructure. Therefore the primary objective for the city is to rethink its entire public

transport policy and develop a more modern, efficient and sustainable vision.

The question is how can this be achieved? It starts with integrating the existing bus, tram and commuter train systems, as well as improving traffic management, safety and security. These are the key features of Gdansk's transport strategy. Equally, the city's authorities are multiplying their efforts to promote sustainable modes of transport and encourage citizens to use environmentally-friendly vehicles on a daily basis. Gdansk is off to a great start, with one of the most developed cycling path networks in Poland and being the annual host of an international conference on the promotion of active mobility. Whilst still deeply connected to the memory of human solidarity and civil action, Gdansk is undoubtedly entering into a period of transformation. With this evolution, sustainable mobility issues gain increasing public interest and support.



Ambitions



Initially the city set out to achieve a modal shift of up to 7 percent from private vehicles to public transport and other sustainable means. Gdansk public transport operators have in recent years built up environmentally-friendly bus and tram fleets. Nevertheless, those infrastructural changes required a significant increase in citizens' awareness and participation in sustainable transport policy. Therefore, special attention would have to be paid to developing an attractive image of public transport and other active forms of mobility as alternatives to the private car. This challenging task would be tackled on different levels: educational and information campaigns, promotional and open air events, and finally, safety and security issue campaigns and actions.

One objective was to create an "urban cycling culture" as part of Gdansk's daily mobility, and promote newly integrated cycling routes and bike parking. Achieving this would require behaviour change amongst citizens, and Mobility Week would play a successful role in integrating these campaigns in a city thus far resistant to attempts at promoting sustainable healthy living. Other external factors such as EURO 2012 Championships and the possible introduction of bio-fuels in Gdansk pushed the city to undertake some ambitious studies. In light of this, the municipality partnered with the Gdansk University of Technology to research the application of ITS (TRISTAR) in the organisation of big events.

Challenges encountered

From the beginning it was evident that the greatest challenge for the successful implementation of the CIVITAS MIMOSA project would be overcoming the legacy of the past. The long period of time that Gdansk spent under communism not only hampered public transport development but left a stamp on all areas of life for the people. Many citizens still harbour unclear notions of what it means to exercise their right to freedom on a daily basis and can feel overwhelmed by problems that used to be resolved by the communist state. People developed an apathetic "waiting" attitude toward many aspects of life.



Another significant challenge is the historical perception of public transport as a means of travel for poor or retired people, whilst a private car is seen to enhance an individual's social status. Meanwhile cycling is perceived as a leisure activity, at best. Therefore the challenge was creating a new image of sustainable modes of transport that would make them "cool" and fashionable.

To overcome this, a huge effort was made to involve citizens from all walks of life in the implementation of the CIVITAS measures, increasing awareness of sustainability and achieving behaviour change. The CIVITAS MIMOSA project gave Gdansk the unique opportunity to overcome these obstacles, providing a cooperative framework and cohesive brand under which to engage different organisations and interest groups, using social media and new technologies. Once this had been achieved the challenge was to jointly implement sustainable measures that would hopefully attract stakeholder and citizen involvement, and ultimately acceptance.

Innovative solutions

Taking into consideration Gdansk's historical and cultural post-communist legacy, careful thought was given on how best to sensitise the public to the CIVITAS MIMOSA project in the run up to our launch date. The answer was to integrate a civil society platform consisting of external institutions, non-governmental organisations (NGOs), media, different organisations, schools and volunteers into every aspect of the project. When planning actions, a specialist team was created whenever possible. Each team consisted of a range of experts from relevant areas, such as safety and security, or cycling promotion. For every single organisation and volunteer involved, an additional stream of new contacts joined the cause. With this approach, CIVITAS MIMOSA established cooperation based on synergies.



To ensure citizens engaged in measures designed for public participation, it was vital to showcase the innovative aspect of CIVITAS MIMOSA through new and emerging communication channels. This meant harnessing the potential of our Facebook and Twitter pages and our Blog with dedicated social media accounts. This allowed citizens to engage in conversation with the CIVITAS MIMOSA team about current projects, recent actions and future plans.

The establishment of a civil society and social media platform was a key factor in the successful implementation of the project in Gdansk, attracting media interest and established the foundation for future group liaison on similar projects. It has become the most effective method of familiarising citizens with sustainable transport.



The “Gdansk Cycle Chic Exhibition” inspires residents

To promote urban cycling CIVITAS MIMOSA Gdansk invited cyclists to submit their pictures and corresponding bicycle stories. The initiative generated significant interest with nearly 40 people taking part in our final casting.

The action, promoted via social media like Facebook enabled us to choose 15 bicycle champions with interesting stories - doctors of medicine, lawyers, artists – all of them cycling on an everyday basis. 15 people, different jobs, different stories, but they all have something in common – a passion for urban cycling as well as fashion sense and appreciation of a good design. Throughout September 2012, 15 real size photos featuring the bike champions against the Gdansk city landscape were exhibited in four attractive central city outdoor locations. The photos will also be used in a 2013 calendar.

The MIMOSA Gdansk bicycle champions are breaking the stereotype that a bicycle is only for those who cannot afford a car. They prove that the bicycle is a trendy and reliable transport mode.

Scaling up

With CIVITAS MIMOSA, Gdansk had a unique opportunity to influence its citizens with numerous campaigns. When developing actions and widening the network of stakeholders through the project, Gdansk was highly conscious of looking beyond the CIVITAS MIMOSA time period. It sought to strengthen long-term networks, invigorate transport policy and work in all fields of sustainable mobility. Already evidence has emerged of the knock-on effect of actions initiated within the boundaries of the project. The success of Bike Fridays, which was started in 2010, has inspired six new towns and small regions around Gdansk to take part in the next 2012 Bike Friday Campaign.



Another successful example is the anti-vandalism pilot training programme organised by CIVITAS MIMOSA in cooperation with the police, psychologists and experts from the Centre for Addiction Prevention. This programme provided training for tram and bus drivers on how to deal with vandalism and misbehaviour on public transport, while utilising records from cameras installed at the stops. Transport operator ZKM now aims to introduce this programme as compulsory training, and provide it for all 800 of their tram and bus drivers.

Looking to the future, Gdansk hopes to build on its successful social media platform of “humanising sustainable transport”, established under CIVITAS MIMOSA. Furthermore, Gdansk is keen to exploit opportunities in digital media applications, as demonstrated by the other MIMOSA cities of Bologna in Italy and Utrecht in the Netherlands.



Bike Fridays Communications Campaign

“Bike Fridays” was an early morning CIVITAS MIMOSA campaign in partnership with members of the Pomeranian Association Common Europe and Polish Gas and Oil. Designed to make cycling “cool” for residents, it took place in central Gdansk over three consecutive Fridays during September 2010 and 2011. Flowers and gadgets were handed out at seven main crossroads where cyclists passed on their way to work and school.

The first Friday, 1,400 bags filled with snacks, cosmetics and CIVITAS MIMOSA information were handed out to cyclists. The following Friday, rain-proof coats with the CIVITAS MIMOSA logo were distributed to encourage people to keep cycling through the winter months. On the third and final Friday, cyclists received flowers and an invitation to the European Mobility Week event where they would receive the gift of a special cycling gadget. With more than 460 invitations exchanged in return for the gifts it proved a fantastic way of mobilising involvement in European Mobility Week and reinforcing the CIVITAS MIMOSA brand.



Future vision



So, what next for the city of Gdansk? Any genuine transformation of Gdansk into a city of sustainable urban mobility is only possible if it goes hand in hand with strengthening local civil society by encouraging citizen participation, as well as that of stakeholders and local NGOs. During the four years of implementation of CIVITAS MIMOSA, we have established cooperation with a wide network of institutions. This constitutes the project's legacy and is crucial for determining the future direction of mobility and transport development in Gdansk. The city will multiply its efforts towards development and modernisation of its public transport network and vehicles fleet, as well as increasing the level of users' satisfaction thanks to clean, safe stops, equipped with CCTV.

Encouraged by its citizens' attitudinal shift towards more sustainable urban transport modes, Gdansk will continue promoting sustainable mobility using innovative interactive marketing tools. Children will have an opportunity to take urban mobility lessons at school, and campaigns like European Mobility Week will undoubtedly become a permanent feature on Gdansk events calendar. Not only that, but as one of the most important university cities in Poland, Gdansk aims to develop cooperation with local young artists in order to make the image of public transport more attractive while promoting their work on vehicles and at stops. And that's just the start of what's to come.



Anti-Vandalism Campaigns to Improve Image of Public Transport

The "Change Your City — Clean Public Transport Stops" campaign arose from the observation that public transport shelters were regularly covered with illegal adverts. The campaign by CIVITAS MIMOSA (in cooperation with the City Hall of Gdansk, PT operators, the police, municipal guards, highways authority and NGOs) aimed to increase the feeling of safety and security for citizens using public transport. The underlying assumption was that acts of crime and vandalism happen less frequently at clean, well lit and monitored stops.



The campaign engaged residents to "look after" their stops and shelters. This involved reporting damage; removing illegal leaflets, posters and stickers; and generally becoming wardens — an idea that lies at the heart of the campaign. The campaign's slogan "Don't be ashamed to peel it off" was officially launched by the Deputy Mayor of Gdansk in September, 2011.

Over 70 information boards were installed at public transport stops, allowing citizens a place to legally post their advertisements. Pre- and post-implementation surveys showed an increase in positive perceptions of bus stops from a 50% mean score to 64%. Organisers hope that the already successful campaign will continue to increase the sense of ownership and responsibility for common property and shared services among public transport users.



Welcome to

Tallinn

Estonia



The Medieval Hanseatic city of Tallinn is Estonia's capital, and the country's largest city with 400,000 inhabitants occupying an area of 159.2 km². As well as being Estonia's centre of culture, finance and higher education, the historical part of the city is a UNESCO world heritage site, and every year attracts an influx of tourists from all over the world.

Following Estonia's independence in 1991, Tallinn enjoyed a period of unprecedented economic growth that had a significant impact on the city and its transport infrastructure.

With the number of private cars increasing at a phenomenal rate, the development of the public transport network slowed down, so that between 1990 and 2000, public transport's modal share fell from 77 to 31 percent. The poor quality of the city's public transport system has affected every citizen, especially those who are the most dependent on it: women, children and the elderly. Yet, Tallinn is a city that is on a continuous, evolving journey where it is always improving.

It is a belief beautifully illustrated by the Tallinn myth

about the old man of Ülemiste Lake who watches the city as it grows. Once a year, he rises from his lake, knocks on the city gates, and asks if the city is finished. The city's guards are under strict orders to respond with a "No!", the belief being that if someone told him that Tallinn was complete, he would flood the city. The moral of the tale is that Tallinn is never quite finished, but always 'getting there'.

The same is true today as the city moves towards more sustainable urban transport, with a number of action plans and strategies. In particular, the Traffic Development Plan for 2005-2014 aims to revitalise public transport and make it more attractive. Tallinn's involvement in the CIVITAS programme starting in 2005, plays a key role in this effort.



Ambitions



As part of its programme of continuous improvement, Tallinn wanted to build on its earlier CIVITAS (2005-2009) successes by participating in another phase of the Initiative. Some existing measures, such as the public transport priority system piloted in the initial phase — are now to be fully implemented by 2013 with the support of European Structural Funds. For CIVITAS Plus, the city had new measures and ambitious targets, including a 7 percent increase in the share of public transport. This would be achieved through a number of measures aimed at improving service quality.

Some were aimed at service users, and others for public transport experts and operators to improve system efficiency. Several of the measures involved preparatory work for ambitious future improvements, e.g. research on the environmental impacts of energy efficient public transport vehicles and alternative fuels, with special attention being paid to existing regulations.

The city's ambitions included:

- Improving the [quality of public transport](#).
- Implementing a [public transport priority system](#) (priority lanes, priority signals, etc.).
- [Regulating parking](#) as a way to encourage a modal shift toward public transport.
- Improving traffic conditions for public transport by [rebuilding and repairing the street network](#).
- Implementing a [real-time traffic management and control system](#) for public transport.
- Replacing the existing ticketing system with a [contactless integrated public transport ticketing scheme](#).

Spotlight Knitting Graffiti Warms Up Bus Commuters

Another of Tallinn's most pressing challenges was engaging with people to improve the image of public transport, increase traveller satisfaction and change citizen behaviour. To ensure success, surveys were conducted to identify the target audiences most receptive to behaviour change. It turned out that these were creative and fashionable people, early adopters of new technologies, less materialistic and more likely to take risks. So Tallinn implemented an unconventional campaign with creativity and sub-culture at its heart. It was entitled 'Knitting Graffiti', and acts as a means of "softening" and brightening up the hard surfaces of public transport with an intrinsic message: "Don't use a spray can, use knitting" and thus engaged with the target audience.

The results were highly positive, with an increase of around 10 percent in the proportion of passengers declaring themselves satisfied with the bus. In a survey conducted before and after the campaign, the number of car owners using the bus increased from 26 percent to 33 percent, again a dramatic shift in behaviour. Encouraged by its first Knitting Graffiti campaign, Tallinn has since launched three buses knit-wrapped in national patterns. Soon another 10 buses will roll out in other city districts and counties to promote their local patterns and cultural heritage. With results like these Tallinn might have behaviour change all wrapped up!



Challenges encountered

Tallinn's most acute challenge has been improving the travel experience for citizens by reducing journey times on public transport. Naturally, it's hard to get citizens to give up their private cars if taking the bus is considerably slower. Many of the MIMOSA measures concentrated on upgrading public transport service quality. However, the poor image of public transport was a major barrier to behaviour change. In light of this, effective communication was to play a significant role in overcoming prejudices and preconceived notions. This meant informing citizens about the measures, getting their feedback through surveys, developing campaigns to improve the image of public transport, and getting people to try it out.



Another major initiative that the city embarked on was replacing the existing Identity Card tickets and paper tickets with a contactless integrated ticketing system that would provide data for planners to optimise the network. The ambition was to get citizens to switch gradually to the new e-ticketing system. However, achieving this would require a huge shift in the behaviour of citizens who are not used to validating their tickets when using public transport. Therefore, the only way to ensure its success would be a series of professional and comprehensive communication and marketing campaigns. So, as you can see, Tallinn's journey has met some obstacles, but once again the old man of Ülemiste Lake can rest assured that we're getting there, with the finish in sight.

Innovative solutions

Delivering a more efficient public transport system and a more enjoyable user experience requires ambitious infrastructural changes, such as the city's newly developed electronic ticketing system. Most ticketing systems in Europe cannot be operated online, frustrating travellers as tickets are only valid for use following the day of purchase. In Tallinn, not only will it be online and secure, but any ticket will be valid for use immediately after purchase. Personal data is protected because it is not written to the contactless card but instead is stored on a central server. Other innovative reasons include:

- > [Student cards and Bank cards](#) can be used.
- > [Payment by Visa PayWave, MasterCard PayPass cards and mobile phones.](#)
- > [On-line information can be exchanged over 3G networks](#)
- > The system supports [black-list and white-list based travel rights](#) that speed up the processing and will work also in case of data connection loss.
- > The new ticketing system is integrated with an [existing on-board information and priority system](#)



Innovation was also central to Tallinn's enforcement measures. The system's red-light enforcement cameras can catch three categories of law breaking motorists: those who run red traffic lights, exceed the speed limit, or use the bus lanes. The system can monitor three lanes simultaneously with real-time tracking, and can precisely indicate the offender. Speed enforcement is measured continuously, and for each lane the speed measurement can be set up for small and big vehicles. First evaluation results reveal a significant drop in violations. At one intersection, for example, the number of daily traffic violations has dropped from 4,000 to about 115, a decrease of 350 percent.

Scaling up



Building on its successful campaign to improve the image of public transport, Tallinn is now ready to make infrastructural improvements, including the reconstruction of one of the most used tramlines in the network, increasing its capacity with 15 state-of-the-art trams. Changes to infrastructure are required as the new trams will be heavier than existing trams (an increase of the axle weight from the current 6.5 to 10.8 tonnes), longer (up to 32-33 meters), and more powerful. The trams will be able to carry more passengers and offer a more comfortable environment thanks to an on-board climate control system.

Tallinn always strives to find new ways to improve the living environment, and eco-driving is a proven way to improve the public transport experience for users and smooth traffic flows in the city. In most cities eco-driving is implemented in dedicated places during training sessions. By contrast, Tallinn carried out the training on regular service routes, thus minimising the cost. Measuring equipment was installed that allowed online feedback registering every wrong move. The results were immediate and measurable providing a great motivator from drivers. Already, evaluation results point towards a significant decrease in traffic accidents. In Tallinn's case only 15 buses were equipped with the technology, resulting in 258 trained bus drivers in just 18 months. Cost-benefit analysis demonstrated conclusively that savings were made, while fuel consumption decreased by 8 percent in standard buses, and 11 percent in articulated buses. In total about 100,000 litres of fuel were saved.

Spotlight Inclusive Mapping Design Approach in Tallinn

“Good Design Enables, Bad Design Disables” formed the innovative approach to Tallinn's new mapping service making public transport accessible to all groups in society. A major barrier to citizens using public transport was the inaccessibility of information. Before hitting the drawing board, Tallinn's transport department first started with its customers and potential customers! Workshops and travel fieldwork was carried out with different user groups; including the mobility and vision impaired, the elderly and tourists.

As a result, a number of improved design solutions were put forward to the team of designers and public transport operators (PT) who then put together a new user-friendly map, ticketing information, timetables and pictogram system. Formal feedback to date from universities and foreign student networks such as Erasmus point to a much improved accessible, user-friendly public transport system. Using an inclusive design process is key to bringing about the best solutions.



Future vision

Tallinn has come a long way in a short time, but what does the future look like for the city in terms of mobility? According to the 2030 Tallinn Strategy, the city centre streets will prioritise pedestrians and public transport vehicles. The city will also look to expand the historic Old Town's pedestrian zone, reduce on-street car parking and complete a network of reduced-traffic roads. In terms of public transport, Tallinn will look to build on its initial successes by further improving environmental sustainability and quality.



Plans include applying the new integrated ticketing system within the capital's public transport system with outlying areas. Tallinn will also reduce costs by merging two municipal public transport companies with the aim of contributing to a better public transport service for all citizens. Looking forward, the city has also set itself an ambitious target to become "European Green Capital" by 2018.



With the support and guidance of CIVITAS MIMOSA, Tallinn is confident it will comply with all the requirements of the Initiative. It's a testament to Tallinn's commitment to a greener city that it has prioritised public transport. The city will also foster modal shift by making car use increasingly challenging. Tallinn has faced its

challenges head on and is emerging as a city that is better to move in, and a city that is better to live in: the very ideals that CIVITAS MIMOSA is founded on, and an achievement of which everyone involved can be proud of.



Winner of 2012 European Cycling Challenge

When Tallinn decided to participate in the MIMOSA-inspired European Cycling Challenge 2012 it can't have imagined that it would fight off stiff competition from larger cities such as Barcelona and Reading to claim the first place. Tallinn's win is quite remarkable given the city's historically low modal share of cycling and virtually non-existent bike path system in comparison to the other participating cities. Anyone with a mobile phone with GPS and Internet connection can participate for free. All participants that mapped at least 50 km of roads by bike with the Endomondo application had a chance to win gadgets and the grand prize of a top quality city bike.

On day one, the Tallinn Challenge Facebook Page registered 177 participants. By day 31, this number had reached over 500. The biggest achievement was in changing the everyday behaviour of citizens. Traditionally associated with sports, people are now using their bikes to travel to work and school and for the sheer pleasure of cycling. Finally, the GPS data recorded by contest participants has helped the Municipality to map favoured cycling routes, bike neighbourhoods and problem spots. Already, plans are underway to encourage cycling with 50 bicycle racks to be installed in Tallinn city centre.



Welcome to

Utrecht

Netherlands



The historic city of Utrecht is the fourth largest city in the Netherlands, and the capital of the Utrecht Province. Covering an area of 99.3 km², it has a growing population of 300,000. The beautiful city centre dates back to Roman times and is home to several major tourist attractions. In addition to the many holiday makers, 50,000 students attend the large number of 3rd level education establishments in the city, among them the largest university in the Netherlands. Due to its central location, the city is a vital node in the region where major roads and railways intersect, attracting all types of enterprises. This is one of the main reasons that road freight traffic is such a big factor in Utrecht's poor air quality.

The pressure on infrastructure isn't set to ease any time soon. Already 100,000 commuters travel into the city every weekday, and the number of passengers moving through Utrecht's central station is projected to double in the next 20 years, reaching up to 100 million travellers a year. While good accessibility is crucial to the economy, it is also important for the people who live and work there. The Municipality is therefore highly committed to ensuring Utrecht is a pleasant environment in which to live and work. The continuous growth in traffic and the development of the city call for an integrated approach and increased investment in cleaner and better transport for the improvement of air quality.

Three guiding documents — the Urban Traffic and Transport Plan (2005), the Air Quality Plan (2006) and

the Execution Plan for Accessibility Programme of Utrecht West (2006) — form the basis for ongoing measures designed to keep the city accessible during its redevelopment. They also formulate new long-term approaches to mobility planning.

Together with the ministries of transport and spatial planning, as well as several private companies, the Municipality of Utrecht is working on a complete make-over of the central train station to include a new terminal as well as building train stations in the western suburbs. The construction works and increased car usage threatens to put a severe strain on the city's accessibility. This concern is at the core of many of Utrecht's CIVITAS measures, with particular emphasis on freight as well as creating a mind shift in mobility.





Ambitions

The city's ambitious policy document aimed at "Keeping Utrecht Attractive and Accessible" will be achieved by reducing the growth of car use by 50 percent by 2030, and cutting CO2 emissions by at least 30 percent by 2020. These are bold ambitions that require the correct initiatives.

Traditionally our goal was traffic management. However, under CIVITAS MIMOSA, Utrecht chose a mix of programmes aimed at behaviour change and investments in public transport and infrastructure. We now wanted to rebuild the city by investing in spaces that stimulate the preferred behaviour. This meant improving public transport, providing good cycling infrastructure, investing in cleaner transport, promoting less damaging and cleaner freight transport, increasing the use of electric vehicles and car sharing, expanding transport by tram, mobility management with businesses, and building new park and ride facilities.

In fact, over 30 projects were started under the umbrella of "Keeping Utrecht Attractive and Accessible", 18 of which are CIVITAS MIMOSA measures. Part of this ambition was to actively involve stakeholders in the planning and implementation of these measures, whether that be citizens or the business community. After all, it is a common task, and their participation would be crucial to any success. Also, Utrecht has a participation standard, which means that engaging citizens was mandatory for the CIVITAS MIMOSA project. This way we would generate new ideas, gain support for our plans, and most important of all, deliver a cleaner and more attractive city to citizens.



Challenges encountered



A city administration can work to change peoples' mobility behaviour, but there are limits. Innovative measures benefit hugely from strong political support, and Utrecht needed to ensure political cooperation to increase the chances of success for its CIVITAS measures. This required a certain degree of political and administrative lobbying.

Challenges often arose when a new city council was elected, as the new council may change previously agreed plans and policies. Transport decisions taken at a national level also provide challenges. For example, the proposed measure to differentiate parking tariffs according to the environmental impacts of the car was stopped at a national level, as it was felt that it discriminated against those who have no possibility of buying a cleaner car. Recent government investment in additional traffic lanes around Utrecht may in fact attract more traffic into Utrecht. In response, Utrecht lobbied closely with the other four largest cities in the Netherlands to convey this message to government resulting in excellent investments in National Public Transport and Air Quality measures.

Throughout the CIVITAS MIMOSA programme, we also invested time and energy to involve citizens and stakeholders, inviting them to debate with policy makers, politicians and each other. The challenge was to find a balance between society's interest and the interests of specific groups, and then to build on win-win situations. To further stimulate sustainable mobility and ensure the city has excellent transport, it needs the support of regional, national government and the EU. We will continue to work in partnership on policy and at project level.

Innovative solutions

As a result of the re-development of Utrecht and in particular its central train station, the city devised a series of innovative solutions under the Sustainable Freight Traffic Action Plan to ensure the city remained accessible and businesses did not suffer. Whilst Utrecht's historical city centre has many limitations for road freight traffic, its extensive set of waterways makes it extremely accessible in other ways.

The electric Cargohopper is a multi-trailer, 16-metre long, 1.25-metre wide, solar powered train delivering parcels in the city centre. The solar panels allow it to be used without recharging during seven to eight months of the year. From April 2009 to April 2011 the Cargohopper made approximately 18,500 deliveries comprising 85,185 parcels total. This translates into 200,000 kilometres, 40,000 litres of fuel and 60 tonnes of CO₂.



Utrecht's Beerboat collects products from distribution centres and transports them to restaurants and businesses along the city's waterways. Driven by an electric motor, it can carry up to 20 tonnes. The boat can accommodate refrigerated and frozen products, and the second vessel (2012) will be able to transport larger cargo such as construction materials, handle waste collection and empty wheelie bins. Fewer trips mean reduced waiting times, less fuel consumption and less unloading time. The boat's availability also means fewer goods are delivered by road, which improves traffic safety for cyclists, increasing accessibility in the city centre and improving the flow for remaining traffic. Under MIMOSA evaluation the beerboat has shown to be a profit making enterprise.

Spotlight

Car Sharing – Behaviour Change Research and Campaign In Action

But freight was not our only focus. We also wanted to change the travel behaviour of citizens and encourage car sharing, with an aim to reduce car journeys and on-street parking. A leading-edge market research study was carried out to pin down the lifestyles and characteristics of potential car sharers. Results identified five types of motorists:

- > **Practical motorists**
- > **Natural motorists**
- > **Rationalists**
- > **Car lovers**
- > **Post-motorists**



We were then able to focus our communications on "post-motorists" (progressive, socially involved and not very attached to possessions) and a proportion of rationalists and car-lovers who are undergoing 'life-changing events'. The post-motorists are not attached to a car and therefore show potential for car sharing. The rationalists and car-lovers are more attached to their car, but due to a variety of issues such as acquiring a driving license, starting work, a change of family status, buying a new house, waiting for a parking permit, etc., they could be more susceptible to changing behaviour. With support from various car-sharing agencies, the city has recently launched an awareness campaign to encourage people to visit the car sharing website www.utrechtdeelt.nl. To date thousands of visitors have been to the website, and more than 50 have requested a car-sharing offer.

Scaling up

Utrecht's ambitious Action Plan for Sustainable Freight Traffic has proved that it is possible to develop an innovative city distribution system. It serves as a model for other cities to bundle, innovate and optimise greener and more efficient freight traffic by forging close working relationships with businesses, suppliers and logistics firms.

Experience with the Cargohopper has demonstrated that more can be achieved in terms of material bundling centres out of town and "just in time" deliveries. It has been so successful that Utrecht has just launched Cargohopper II, a vehicle capable of loading up to 10 euro pallets. It can go up to 50 km/h and can travel 250 km without recharging. Bigger cities like Amsterdam, Enschede and Amersfoort have already taken the Cargohopper concept on board. Utrecht's Beerboat has attracted international interest in terms of recognition, awards and transferability potential. Already Berlin is investigating the possibility of using a Beerboat in its own system of waterways. The German capital is in the process of conducting feasibility studies and identifying potential customers.

Car sharing has been trialled in several CIVITAS cities, with varying approaches and levels of success. In Utrecht we believe we have developed a unique approach to promoting car sharing and removing prejudices. The secret is to gain an understanding of the target audience through market research and identifying those most likely to change. Initially Utrecht's approach was piloted in just a few neighbourhoods but the system will probably be implemented throughout the province.

Also Utrecht Accessible Pass has already been expanded throughout the region of Amersfoort with the "Eemland Accessible Pass" and plans are in progress to make the Utrecht Accessible concept a Regional Province initiative.



Spotlight

One Brand, One Voice – Accessible Utrecht

Joined-Up Thinking on Mobility Information, Infrastructure and Budget forms the basis of Keeping Utrecht Accessible. Three infrastructural authorities, several public transport operators and Utrecht trade and industry have come together to formulate one cohesive and integrated strategy on mobility communications with a defined budget, an agreed set of obligations, and an evaluation programme.

Measures include one centralised source of communications under a single brand, "Accessible Utrecht", to keep citizens informed about traffic delays, road construction and mobility measures. The Accessible Utrecht website has 170,000 visitors a year and is integrated with LIVE Google maps, providing citizens with a full view of major road works by the various municipal, energy, and transport authorities. Citizens can also access information about special events and transport schedules, P&R locations, traffic jams, bike services and rental, car-sharing, etc.

Another popular service is the Utrecht Accessible Newsalert, sent out over 80 times a year to 12,000 subscribers. Other Utrecht Accessible communications measures include promotion of Park & Ride, rental bikes, rail routes and car-share. The final most successful aspect of Accessible Utrecht has been the public transport pass. 20,000 passes have now been sold to over 400 companies, with 40 percent of users being former car users. The result: 3,200 fewer cars during rush hour.



Future vision



After four years of CIVITAS, Utrecht has gained an enormous amount of new experience with sustainable transport measures. It has won several awards for its innovative approach to mobility. Utrecht truly is a success story, and going forward we will continue to share our knowledge and experience in Europe and the Netherlands, as well as learn from other cities.

During CIVITAS MIMOSA Utrecht conducted research into lifestyles and mobility behaviour. The result was a segmented approach to target groups and a participation model identifying specific triggers, satisfiers, and approaches for changing behaviour. An integrated approach in communications has been developed and includes a mobility marketing plan guided by an umbrella marketing brand image.

It is crucial that the goals of sustainable transport projects are embedded in policy documents, and in this respect, public and private partnerships have proven to be essential. As well as the Air Quality Action Plan, which will be realised in the coming years, Utrecht initiated the “Utrecht Attractive and Accessible 2030” plan: a blueprint for future sustainable mobility with seven key ambitions:

1. Achieve a mind switch in mobility behaviour that will require a customer-based approach; intense cooperation with citizens, businesses and stakeholders; and spatial adjustments to stimulate the preferred behaviour.
2. Create high-quality public spaces.
3. Foster vibrant development near intersections.
4. Ensure that urban areas determine the choice of mobility.
5. Place trams at the heart of the public transport system.
6. Encourage cycling as the primary transport alternative in town.
7. Transform the city ring into a boulevard, with no fast lanes.



Utrecht's Mobility Motto - the 5 Es

By continuing to apply the five Es, we can create a cleaner, more sustainable Utrecht, and we will succeed with the help of stakeholders, citizens, other cities, local and national governments and the EU. The five Es are:

Education: Information, knowledge, communication.

Enforcement: Making new laws and rules, and establishing an enforcement policy.

Encouragement: Promoting benefits and making sustainable modes cheaper, free and giving samples

Empowerment: Give citizens the belief that they can change. Use role models in communications.

Engineering: Adjust the environment; invest in good quality products, infrastructure and innovations to make behaviour change more attractive.



Conclusions



Whilst being a collaborative entity under the umbrella of the CIVITAS MIMOSA project, the five cities of Bologna, Funchal, Gdansk, Tallinn and Utrecht are each important in their own right as vital traffic hubs within their regions, with the associated problems to be solved. It is our key successes in each city that will be our legacy to the world of sustainable mobility. Yet, what are the foundations of that legacy?

Innovation

With the ‘I’ in MIMOSA standing for innovation, it is no surprise that this was always a crucial ingredient in the project. The MIMOSA cities had to adapt and invent solutions to solve their own unique set of problems. Take Utrecht, where the focus was on accessibility. The city recognized the potential of its canal network, leading to the invention of the Beerboat and Cargohopper. Or take Bologna, which named its “T-Days” Initiative after the T-shaped layout of its central pedestrian zone. Or consider Tallinn, which hooked onto the world-wide movement for “Knitting Graffiti Art” in public spaces, adapting it to soften the image of the city’s public transport, engage citizens and increase service usage. Innovation didn’t just play a part in our successes; in many ways it was the driver.

Technology

Linked to the innovation in each city was the implementation of new and often ground-breaking technological solutions. The vast amounts of data related to sustainable mobility presented CIVITAS MIMOSA with the opportunity to develop the MIMOSA Search Engine. This tool can access databases around the world and provide relevant sustainable transport information in numerous languages. MIMOSA cities used advances in intelligent transport systems to solve traffic rule compliance problems. This resulted in improved safety and dramatic reductions in accidents. Technology played a pivotal role in Tallinn where citizens will switch from using their own identity cards to an integrated smart card ticketing system. Utrecht applied technology to keep its citizens informed about accessibility issues via its Utrecht Accessible website. Finally, a notable and growing trend throughout the project was the use of social media to engage with citizens. Gdansk and Funchal set up dedicated Facebook pages that gained many followers and fans.

Blogs and tweets kept people informed and empowered everyone to join the conversation on sustainable mobility.

Policy

The differing political environments in each city meant varying degrees of cooperation and support for MIMOSA measures. In certain instances, national policy overruled local policy, leading to delays and difficulties. In some cases, cities had existing traffic or environment policies to which CIVITAS brought added value and impetus. Yet, one of the most encouraging and lasting outcomes is the way MIMOSA initiatives have shaped decisions about plans and policies for the future. In Funchal, for instance, plans are in place to ensure that modernisation of the bus fleet will continue with the help of European Regional Development Funds (ERDF). Meanwhile, Bologna has secured political backing to further its ambitious plan for pedestrian areas. The CIVITAS MIMOSA project always required the right initiatives to succeed, yet it’s having the right policies and support in the background that will ensure the lasting legacy each city seeks.

Infrastructure

Improvements in infrastructure have remained a key priority for MIMOSA cities, who adopted an innovative integrated approach involving technology, citizen engagement and partnerships. There have been many notable achievements and breakthroughs, including the public acceptance and take-up of new bike and tram infrastructure in Tallinn and Gdansk. In each case, the city had to overcome a negative image or create infrastructure where none had been. Other impressive milestones have been the modernisation of the bus fleet in Funchal; the introduction of hybrid buses in Bologna; and new freight infrastructure in Utrecht.



Finance

With support from CIVITAS MIMOSA, decision makers, citizens and partners from the five cities took the opportunity to invest money, time and effort in a series of innovative integrated sustainable mobility measures. Even now, four years on and with ever tightening budgetary constraints, the positive and dynamic results arising from the measures make the

MIMOSA cities more determined than ever to carry on with their new path, and take their vision of sustainable mobility to the next level. Funchal, Bologna and Utrecht have lobbied members of the European Parliament to make available ERDF funding for infrastructural investment for cities that have demonstrated innovation in the area of sustainable mobility and seek to build on their successes.

Facts & Figures

Behaviour Change

From the outset the MIMOSA cities recognised the need to change citizen behaviour. They have tried both carrot and stick approaches, enabling and facilitating desired behaviour on the one hand and restricting and preventing bad habits on the other. In **Utrecht**, a participation model was applied to create win-win situations where citizens were consulted and engaged prior to the enforcement of restrictive measures. This approach resulted in *3,200 fewer cars on the road daily, 18,500 deliveries made by electric Cargohopper, and significantly reduced congestion.* **Funchal** adopted an award system that encouraged hotels to remove their courtesy buses from service, and instead offered “Mobility Kits” to tourists to encourage them to take the “Green Bus” as an alternative. In total, *17 hotels participated, 5,000 kits were sold leading to 28,000 more passengers for the city’s public transport services.* In **Gdansk**, citizens mobilised to clean up and invigorate public transport stops with their “Don’t be ashamed to peel it off” campaign. The levels of involvement and engagement surpassed expectations. A survey revealed that *71 percent of residents supported the clean stops action, and 51 percent were willing to participate actively.*



Understanding The Target Audience

Key to the success of some of the measures was in-depth understanding of the target audience. **Utrecht’s** car-sharing campaign, for example, was based on segmentation of citizens according to their level of attachment to their car. This knowledge allowed the city to focus on those *23% of citizens most likely to change behaviour.* In **Tallinn** the city focused on citizens ready to embrace public transport. Campaigns tapped into the target group’s desire to be creative and unconventional, with the city’s innovative “Knitting Graffiti” campaign resulting in a *7% increase in car owners taking the bus.*



Pedestrianisation

Pedestrianisation of city centres was an ambition of both Bologna and Funchal. In **Funchal** a 4.5km area is permanently closed to traffic, while in **Bologna** the 20,000m² central T-zone is now pedestrianised at weekends and public holidays. Pedestrianisation in Bologna is a direct result of the highly successful MIMOSA T-Days pilot scheme with 81 percent of T-days participants in favour of the highly pedestrianised zone.

Cycling

Another success story of CIVITAS MIMOSA was the dramatic upsurge in the popularity of cycling following the implementation of various strategies across the five cities. The consortium embarked on cycling measures from different starting points. Funchal and Tallinn had very low levels of cycling, Gdansk had just seasonal cycling, while Utrecht and Bologna had comparatively high, year round use. Each sought merely to increase modal share from existing levels.

In **Tallinn**, 500 people took part and won the European Cycling Challenge in May 2012, covering almost 50,000 km.

Gdansk's "Bike Fridays" Initiative rewarded cyclists with approximately 1,400 goody bags handed out each Friday in September 2011, encouraging 460 more cyclists to turn up at their European Mobility Week Event. Gdansk has seen a 20 percent increase in its number of cyclists and a rise in modal share from 2 percent in 2009 (with 2012 figures to be released shortly).

Utrecht found an innovative solution to a particularly Dutch problem (too many cyclists with no place to park) by providing mobile racks that could easily be set up when and where it was needed. It was an instant success, and in November-December 2011, 6,445 bikes were parked in three mobile parking facilities. Utrecht's modal share has increased from 52 percent in 2008 to 55 percent in 2011.

Despite a topography that's especially challenging to cyclists, even **Funchal** got in on the cycling game with its combined Bus and Bike service. Citizens could cycle down the hills of the city and get a lift back up with one of 14 buses with rear-mounted bike racks. Though only 56 bicycles were carried on Funchal's Bus and Bike buses, the city saw a 10 percent increase in the popularity of cycling.



Finally, **Bologna** made significant investments in its cycling network, which grew from 118 km in 2009 to a projected 143 km for 2012-13. Its public bike system (with 188 bicycles and 23 docking stations) saw an increase in user numbers from 1,922 in 2008 to 4,800 in 2012 while its 20 cycle counters stations showed how cycling has increased by 60 percent from 2008 to 2011.

With 69 measures implemented and over EUR 23 million spent, the final outcomes of the CIVITAS MIMOSA project have yet to be evaluated. However, these facts and figures demonstrate the impact that innovative, integrated and insightful approaches can achieve. Each city has much to be proud of, and crucially, has proven successes to champion the cause of sustainable mobility long into the future.





Contact Details:

There are several ways to find the latest information about CIVITAS MIMOSA measures;

- > Visit our website and search engine at **www.civitas-mimosa.eu**
- > Up-to-date results on city measures can be found on the CIVITAS website: **<http://www.civitas-initiative.org>** and click on Cities/Demonstration Cities
- > Project Coordinator: Manuela Marsano, Municipality of Bologna, manuela.marsano@comune.bologna.it
- > Come chat directly with members of the CIVITAS MIMOSA team at the CIVITAS MIMOSA Groups in LinkedIn



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