



Po třech letech

Projekt dAIR byl zahájen téměř před třemi roky a jeho hlavní myšlenkou byla výměna osvědčených postupů při snižování spotřeby fosilních paliv dekarbonizací regionů okolo letišť. Po deseti studijních návštěvách, třech strategických setkáních a mnoha e-mailech a telefonátech mezi partnery se projekt blíží ke svému konci. Závěrečný ceremoniál projektu dAIR se bude konat 13. října 2014 v Bruselu a sejdou se na něm všichni partneři projektu i celá řada vystavovatelů prezentujících ve speciální výstavní sekci svoje osvědčené postupy.

Díky deseti studijním návštěvám mohli všichni partneři objevovat nové dobré nápady, které by mohli uplatnit i ve svém regionu. Po každé ze studijních návštěv jsme také vydali bulletin, který shrnoval některé koncepty a události, které z dané návštěvy vyplynuly. V tomto posledním bulletinu projektu najdete na následujících stránkách předchozí vydání bulletinu v jedné koláži. Stejně jako u celého projektu dAIR platí, že vše souvisí se vším; studijní návštěvy by tedy neměly valný smysl bez zkušeností a nápadů z těch ostatních.

Děkujeme všem, kdo tyto studijní návštěvy a hledání osvědčených postupů umožnili, a jsme přesvědčeni, že výsledky a koncepty vzešlé z tohoto projektu přetrvají dlouho a přinesou pozitivní změny pro životní prostředí ve všech regionech projektu dAIR.



D-AIR colleagues,

Welcome to the first edition of our newsletter which aims to keep you updated with all our activities.

It's been a busy beginning of the project for everybody and the first study visit has had a successful outcome, with most members present in El Prat, Barcelona. More on that on the next page.

Additionally, a kick-off meeting took place in our lead partner's region in March. The City of Eindhoven hosted the delegations of all of our members and set forth the basic framework for the project.

With the first six months of the project already behind us we look forward to a successful continuation of the work we have begun.

So, what are the key aspects of dAIR? Keep reading and find out.

www.dairproject.eu

dAIR is about creating green sustainable airports

dAIR is about improving the carbon efficiency of the airports

dAIR is about improving the surface access to the airports

dAIR is unique because it unites airport operators, local governments and public transport operators

dAIR is your tool for sharing expertise.

Welcome in dAIR, we look forward to the next three years with you

dAIR is funded by the European Regional Development Fund through the INTERREG IVC programme. It is a project where local governments together with airport operators work on converting airports into ecological and sustainable transport hubs, helping to reduce CO2 emissions. Two main aspects will be in focus: airport operator activities and surface accessibility. The project partners will be working together on both aspects.

IN dAIR

Issue 5 • July 2013

The newsletter of the Decarbonated Airport Regions project

European Union
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Stockholm's success story

In the capital of Sweden, the main international airport has been getting a lot of attention. The group that operates it, Swedavia, is the first carbon neutral airport operator in Europe and the world, across their entire Swedish portfolio.

Arlanda strikes as an airport that has become carbon neutral in record time and yet still continues its plight toward even more sustainability. The promise is that by 2020 the airport operations will release zero carbon emissions in the atmosphere. This is not an easy task to achieve, but the Swede's plans have been very successful so far.

In the dAIR project, we have looked at a number of airports searching for best practices in reducing carbon emissions from airport operations and surface access to the airport. Stockholm provided the partners in the project with a good deal of new ideas.

What does strike in Arlanda is a business model, which beyond being modelled to reach the customer's expectation, is also highly connected to sustainability. Every action that is taken by the airport takes into account the sustainability factor – how will this measure affect the environment and what can be done for that impact to be minimised. As Elisabeth Celsing, Head of Environmental Department at Stockholm Arlanda airport explained to

"Last year we celebrated a very important mark, we have surpassed 50% in percentage of passengers using public transport to get to the airport," said Frederik Jareved, Head of Public Affairs at Swedavia.

This is a very large number compared to other airports in Europe and has been achieved through offering varied options of access to the airport, not only from the city center but also from regions where employees of the airport live in.

Beyond all, the success of these airports measures came from the staff's commitment to environmental sustainability.

"It is possible to achieve both carbon neutrality, but also a high rate of public transport usage. It is important to us to look to export more of this model into the rest of Europe, since it is clearly a successful one," said Vladimir Vytiska Mayor of Ústí nad Labem – Prague Airport Region, one of the partners in the dAIR project.

dAIR will continue to identify problems and solutions in airport areas over a three year period, helping both public authorities and airport operators to understand the larger framework that is surrounding air quality at airports.

Through the Eco-taxi project (read more on page 4) the airport has also been able to engage stakeholders with their measures. All taxis picking up passengers at Arlanda emit less than 120 grams of CO2 per kilometre, qualifying them as eco-cars.

In this article carbon refers to the carbon emissions resulting from the use of fossil fuels

EINDHOVEN AIRPORT IN 2050?

Service providers to the airport are also drivers of innovation and at the dAIR study visit in Eindhoven they presented the project partners a variety of products that will change the way an airport operates and also will significantly help it with reducing carbon emissions.

A number of airport providers were asked in Eindhoven about how they see the Dutch airport in 2050? Together with the project partners a number of ideas surfaced on this subject, with improvement to surface access efficiency, catering to passengers and being able to adapt quickly being some of the most important ones.

Seven topics were presented and seven companies joined in an interactive exhibition where they presented their operations and future views.

Building/ construction

Assessment and evaluation of sustainability will not only concern the finished product, but also the realization process, for example: what is the CO2 footprint of the company,

The building and its surrounding infrastructure will be seen as a whole, for example making use of sustainable asphalt which will include heat and cold storage

Finally, it is important to take the following into consideration: all that is built today will be used completely different in 2050.

Interiors

Airports in the future will be multi-functional and will be used as temporarily office place, meeting location with lounges and meeting areas, entertainment and relax areas, for sport and fitness activities, shopping and most likely a variety of other activities. And of course for flying as well!

The interiors need to be flexible, robust and made of natural materials. The interior will be supplied on a lease and rental base and will be changed every few years. Suppliers take the interior back

The companies

- Building/ construction (Heijmans)
- Interiors (Gietsson)
- Baggage handling systems (Van der Laan Industries)
- Parking (Visser & Roodaards)
- Electrical installation (Manuveld)
- Technical installations (Aero and heating (Kuipers))
- Waste (Sita)

Issue 6 • September 2013

The newsletter of the Decarbonated Airport Regions project

European Union
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Leipzig Airport - getting dAIR

development model," says Markus Kopp, the CEO of Mitteldutsche Flughafen AG. He mentions the serious responsibility that the airport has taken in terms of environmental and noise protection. "We have invested some € 135 million in noise protection programs for our airports," he added in relation to the noise abatement program for about 10,000 houses delivered by the consortium.

Leipzig/Halle is in the incipient phases of a widespread decarbonisation phase, admitting that more and more of their shareholders demand ecological behaviour as part of their political strategies. Thus the airport executive staff has identified environmental issues as key for further development.

The airport has developed environmental guidelines which are mandatory for all employees, and involve looking at the consequences on the environment before taking a decision and also increase their awareness to the CO2 emissions of the airport area.

The DHL Express effect

DHL Express moved its hub operations from Brussels to Leipzig in 2005, taking advantage of a virtually un congested airport with a comprehensive infrastructure.

DHL brought thousands of workers on the platform, all of which need to travel to and from the airport on a nightly basis.

For them, and also the day time workers, the airport, in collaboration with the local public transport operator and Deutsche Bahn is offering reduced rates through a program called Job Ticket (read more about that on page 4). Towards this move, dAIR has been mentioned as a driver of action.

Other very interesting projects are happening at Leipzig, including a car sharing system offered by TeilAuto. The airport is also in the beginning phases of having an energy management system that is provisioned to remove significant amounts of CO2 from the operations.

Read more about Leipzig / Halle airport and the dAIR study visit in this issue of our newsletter and visit our website for in-depth coverage.

www.dairproject.eu

Malta: a special place

In the dAIR project Malta is a very interesting case. Its characteristics are unique and it makes for a challenging situation from both a surface access and airport operations point of view.

Malta's last operational train was well over 70 years ago; the size of the island limits the possibilities for public transport – leaving just a few in place. The bus system has recently been restructured and new ideas are put forth for optimising public transport.

The dAIR partners gathered in Malta to discuss ideas and find out what best practices the transportation system as well as the airport operator can share.

The bus

The partners welcomed speakers from Arriva, the new bus company operating the public transport on the 400,000 strong island has been revamping the transport network. All the buses in Malta have been changed, scrapping one of the most well-known, but severely polluting landmarks of the city: The Malta bus.

Arriva wants to improve public transportation and considers the airport as an important place where frequency can be increased.

The car

The main mode of transport for the Maltese remains the car. It is one of the countries in Europe with the largest car per person ratios in Europe. This is also due to many Maltese policies promoting the usage of the car. The Malta International Airport expansion actually envisions an increase in parking spaces. On-street parking is generally free across the island; privately owned/operated car parks, such as those at the airport, are normally at a charge. Malta International Airport has proposed so many parking spaces because of planning regulations.

Bottom line is that it is cheap to have a car in Malta. Then, how do you discourage people from using it?

The carbon

dAIR, however is about the reduction of carbon emissions at airports. Public transport plays an important role and significant improvements are being made. While it's not perfect, it's on the right track. In terms of airport operations, the airport authority is attempting to modernize much of their equipment and is prioritizing flights in areas where they do not need to taxi for too long to get to the runways.

The conclusions

After three study visits in three different areas, a pattern is emerging. There are many things that differentiate these airports and their operations and access, but at core, the will to remove CO2 from the atmosphere is shared. Good practices exist everywhere and can be exchanged. Malta is a great example of a work in progress.

For more information on the dAIR project and its members please visit our official webpage at: www.dairproject.eu

Mazovia's Newest Challenge

When the dAIR partners came to Modlin Airport for the first time, it had been reopened for one day. The newest Polish airport has been through a lot lately, including missing out on almost of year of operations due to problems to the runway.

Since it is a new airport, carbon emissions from airport operations and surface access are still an issue that will develop when the airport will be thriving, but for now the airport is focusing also on their environmental footprint. The airport is surrounded by national parks and very close to protected animal areas, thus their environmental department is focusing on issues of noise and environmental protection.

Yet, when it comes to decarbonisation there are some possible projects in the pipeline for Modlin airport.

Rail

For now the airport is not directly connected to the Polish capital of Warsaw by train, through there is a hybrid train-bus possibility. This means you can take a train from Warsaw until Modlin station, which is six kilometers away from the airport, at which point a bus picks you up and takes you to the terminal. Plans are to extend the existing line all the way to the airport where it will have an underground station. This means an additional six kilometres of rail that will need to be built. There would also be a train connection between Warsaw Chopin airport and Modlin, facilitating airport to airport transfers. This would be a possibility to reduce CO2, but it depends significantly also on Polish national policies on electricity production. For now, 90% of Polish electricity is produced using coal.

All in all, Modlin Airport is in the very beginning. In a country like Poland; where, unfortunately CO2 reduction is not high on the agenda, just the participation in a European project such as dAIR shows a commitment to changing the current situation. The challenge for Mazovia will be to be able to differentiate itself from the others with a policy that is geared towards carbon emission reduction and hopefully neutrality.

Charles de Gaulle - on the road to less carbon

The dAIR project is aimed at removing carbon emissions from surface access and airport operations. The largest French airport is a great case for looking at good and best practices in this instance. The project study visit that took place April 22-23 looked at identifying some of them.

How do you limit carbon emissions from surface access and airport operations in one of the world's largest hubs? That is the question that project partners, experts and speakers had to answer in the latest study visit of the project.

One of the challenges of the CDG region is the sheer number of administration bodies that are in charge of

"The key to managing such a large infrastructure and resulting flows is the creation of territorial dynamics" says Marc Gentilhomme, director of Terres de France, a set of municipalities nearby Charles de Gaulle, and host of the visit.

One of the notions put forth at the event by Professor Callum Thomas of the Centre for Aviation Transport and the Environment of Manchester Metropolitan University was that every single action taken at an airport will have carbon implications, be it waste management or baggage handling.

The Paris Charles de Gaulle region already has an innovative system of public transportation in place, called Fileo (more on that on page 4) as well as an eco-friendly automated people mover, used inside the terminal and airport called CDGVIAL.

The CDG area has the advantage that a high number of passengers already use public transport to get to the airport (44%), but through the dAIR project, the municipalities around the airport wish to not only optimise their services and increase ridership, but also look at sustainable ways of doing it. At the moment ridership on mass transit from nearby villages is much lower compared to the one from central Paris.

"The partners in dAIR including all the experts are not only dealing with the technical side of solutions, but as important is the "philosophic" approach, how can we influence the behaviour of the people that are using the modes of transport, including their awareness of the environmental aspects, especially on the long term; that must lead the finding of solutions", says Maarten van den Nieuwenhof, dAIR project manager.

www.dairproject.eu

Issue 8 • April 2014

The newsletter of the Decarbonated Airport Regions project

European Union
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In Prague, environment responsibility begins early on

Access to Prague airport is suffocating. Every month, some two million cars make their way to the main Czech airport. While infrastructure in the area has been improving in the last decades, the airport is not yet within environmentally friendly reach from the city and the neighbouring areas.

Beyond that, a number of municipalities around the airport, formed themselves into an organisation called Prague Airport Region. They have been active partners of the dAIR project. Reducing the carbon footprint of the airport when it comes to surface access and airport operations is bound to improve their residents' lives as well.

The airport is handling close to 11 million passengers a year and is growing, with Prague being a bustling cultural destination at the heart of central Europe.

But not only surface access is an issue. CO2 emissions from airport operations are a big factor in the pollution in the area. Taxing aircraft, heating and cooling of the terminal play a pivotal role in the origin of CO2 emissions.

Prague Airport Region and the airport administration are looking at best practices from around Europe through the dAIR project to understand and solve the situation.

"Since we are nearing the end of the project, I think we have gathered a number of good ideas that we can share with our airport partners as well as with the people who live in our area. We have brought the stakeholders of the airport at the table as well, and organised a couple of stakeholder forums to see how we can adjust to the needs of everyone involved," says Vladimir Vytiska, of Prague Airport Region and Mayor of Ústí nad Labem, a municipality located just outside the airport.

The Prague airport dAIR study visit took place between the 25 and 27 March and included a range of speakers who brought more light to the issue. They have highlighted possible solutions to the challenges which Prague Airport is facing as well as show what has already been done in the area.

Surface Access

In terms of surface access the region is interested in developing better infrastructure to the airport, as well as efficient and upgraded public transport. There is a plan for a railway to the airport, since at the moment the only public transport mean to the airport is the bus.

Upgrades to buses are also pending, including electric buses with charging points at passenger stops. These have been presented during the study visit.

Environment Education

One of the unique aspects of the study visit was the introduction of the projects that the airport has with local schools in the area. Environmental education is tackled with pupils of fourth and fifth grades who learn facts about airport operations and the neighboring environment – noise, emissions, water cleaning and protection.

The program is conducted using video and audio recordings, interactive games and visualisations, allowing the children to learn about various adverse effects on the environment and acquire basic information about its protection.

Through this, the airport and the region are looking also at the future of environmental protection and are fully aware that in order to have an area with clean air and low carbon emissions they must involve and convince the future generations of its importance.

Airport Operations

The airport has already joined the Airport Carbon Accreditation



Shora (zleva doprava): Julian Jäger (CEO, letiště Vídeň), Regina Wialla Zimm a Wolfgang Khutterfrom (město Vídeň), větrná elektrárna blízko vídeňského letiště, letadlo TAROM zaparkované na stojánce ve Vídni, Franz Jöchlinger (letiště Vídeň), parkoviště na vídeňském letišti, Uli Koehler, Regina Palla Zimm a Delia Mitcan (projekt dAIR).



Foto: Marius Nicolescu

in t f dAIR na sociálních sítích
 Linkedln: <http://www.linkedin.com/groups/DAIR-Decarbonated-Airport-Regions-4502833>
 Twitter: @DAIRtwit
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Partners

City of Eindhoven
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 Airport Regions Conference
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 City of Vienna
 Province of Bologna
 City of El Prat de Llobregat
 Transport Malta
 Mazovia Voivodship
 Prague Airport Region



NEWS



GETTING dAIR
 Clean airports. Decarbonised regions.
 October 13, 2014, Brussels, Belgium

FINAL EVENT

Novinky z projektu dAIR Poslední zastávka: Brusel

Závěrečný ceremoniál projektu se bude konat 13. října 2014 v Bruselu

Bude to závěrečné setkání v rámci projektu dAIR, které bude spočívat v jednodenní bruselské konferenci na téma výstupů tří let práce, kterou odvedlo více než 10 partnerů z celé Evropy na dekarbonizaci letištních regionů.

Snižování uhlíkových emisí do ovzduší v okolí letišť je pro regiony i vlastní letiště klíčovým faktorem.

Evropa se zavázala snížit svoje emise uhlíku do roku 2020 o 20 %. Omezování emisí uhlíku na letištích a v jejich okolí má k tomuto ambicióznímu cíli přispět. Po více než dvou letech promýšlení tohoto tématu se chce 10 obcí a letišť zapojit s vámi do diskuze nad touto problematikou a představit vám výsledky projektu.

Na konferenci se mimo jiné budou řešit problémy povrchové dopravy na letiště a zpět, snižování uhlíkových emisí na samotném letišti a různé cesty inovace.

Projekt dAIR na titulce Air Rail

Letištní regiony se často vyznačují velkou uhlíkovou stopou. Selský rozum si tyto emise spojuje výhradně s emisemi z leteckého provozu; studie prováděné asociací Airport Regions Conference na řadě evropských letišť ale ukazují, že věci se mají jinak. Polovina emisí spojených s existencí letiště pochází z povrchové dopravy na letiště a zpět a z pozemního provozu na letišti samotném. Na snižování emisí CO2 z povrchové dopravy se může významně podílet i intermodalita letecké a železniční přepravy.

Evropský projekt

Na řešení tohoto problému pracovalo v uplynulých dvou letech 14 partnerů z 10 evropských regionů v rámci projektu s názvem dAIR (Decarbonised Airport Regions). Partneri si vyměňovali osvědčené postupy v oblasti pozemní dopravy a provozu letiště a v několika regionech již byly implementovány pilotní projekty.

Hlavní problémy

Pokud jde o pozemní dopravu, existuje v oblastech

okolo letišť celá řada problémů, jako je vyšší počet jízd „kiss and fly“, při kterých vznikají značné emise při jízdě prázdného vozidla, málo informací nebo nepřehledné informace o veřejné dopravě nebo nedostatečná veřejná doprava.

Většina velkých evropských letišť přitahuje značný objem provozu, což znamená velké dopravní zácpy.

Autobusy jsou dobrou alternativou, ale produkují emise a jsou zdržovány v dopravních zácpách.

Železniční řešení

Logickým řešením snižování emisí a eliminace dopravních zácp je vlakové spojení s centrem města, které letiště obsluhuje. Všechna letiště sdružená v projektu dAIR mají buď určitou formu vlakového spojení nebo o výstavbě takové železnice uvažují. Na varšavské letišti Modlin, které je nejnovějším letišti v Polsku, se cestující dostanou vlakem, z něhož poblíž letiště přestoupí do autobusu, který je doveze přímo k terminálu.

Ve Stockholmu a Vídni si mohou cestující vybrat mezi lokálními železničními dopravci a expresními vlaky, které zároveň nabízejí možnost odbavení již ve městě.

Vlak je v každém případě ekologickou a efektivní alternativou ke všem ostatním formám dopravy na letiště; vyžaduje ale obrovské vstupní investice, které často vyvolávají u rozhodujících osob pochyby o budoucí úspěšnosti této infrastruktury.

Marketing a propagace jiné než automobilové dopravy z letiště

Dobré vlakové spojení na letiště může být z ekonomického hlediska velmi neúspěšné, pokud nemá správný marketing. Lidé musí mít aktuální informace o dopravním spojení.

Informační systémy v terminálech a v centrech měst mají pro efektivní provoz vlakového spojení s letištěm zásadní význam. Dopravní spoje musí mít dále dostatečně krátké intervaly, aby je mohly skutečně využít všichni cestující.

Future plans

Projekt dAIR na sklonku roku 2014 oficiálně skončí. Výsledkem jednání a výměny osvědčených postupů v rámci tohoto projektu je řada implementovaných pilotních projektů. V Barceloně byl ve městě El Prat zaveden systém autobusové dopravy na vyžádání, který umožňuje dopravu zaměstnanců letiště v nezvyklou denní dobu na letiště a zpět. V Lipsku má nyní většina zaměstnanců letiště k dispozici systém s názvem Job Ticket, který nabízí bezplatné jízdenky na vlaky jedoucí na letiště a zpět.

Studijní návštěva ve Vídni: závěrečná, ale určitě ne poslední



Ve Vídni existuje má spolupráce mezi městem a letištěm dlouhou tradici. Region je na špici vývoje, pokud jde o dialog a mediaci mezi zainteresovanými subjekty spojenými s letištěm a jeho sousedy. V posledních deseti letech zde fungovalo mediační centrum, prostřednictvím kterého dokázalo letiště dosáhnout rozvoje (včetně výstavby nové ranveje) se souhlasem sousedů.

Pokud jde o dekarbonizaci, letiště spolupracuje s městem i v této oblasti; pomáhá mu v tom skutečnost, že město vlastní značný podíl i v samém letišti. Kromě toho se letiště zajímá a aktivně působí v oblasti udržování CO₂ neutrální pozemní dopravy a provozu letiště.



„Podíl veřejné dopravy na letišti ve Vídni prudce stoupá,“ řekl Julian Jäger, CEO na vídeňském letišti, při zahájení studijní návštěvy ve Vídni, a zdůraznil význam mnoha variant, které letiště ve spolupráci s městem nabízí v oblasti veřejné dopravy spojující obou míst.

Jedním z nejvíce inovativních a také nejzajímavějších dopravních řešení, které partneři na návštěvě ve Vídni mohli vidět, je City Airport Train (CAT). Jde o expresní vlakové spojení mezi centrem města a letištěm, které překoná danou vzdálenost za 16 minut a které též nabízí možnost odbavení zavazadel na nádrží, a to až 24 hodin před odletem. Samotný vlak je 100% CO₂ neutrální, protože zdrojem energie pro jeho provoz je voda a slunce. Letiště dále spolupracuje s rakouskými železnicemi na provozování dálkových vlakových spojů z letiště do jiných destinací v Rakousku, dodal pan Jäger.

Letiště též zavedlo cyklostezky, které umožňují zaměstnancům z okolí dojíždět do práce na kole.

Dále je v okolí letiště k dispozici řada projektů sdílení kol, které nabízejí i kola s pomocným elektrickým pohonem.

„Mezi Vídni a jejím letištěm jezdí 100% CO₂ neutrální vlak“

Letiště neustále usiluje o ochranu životního prostředí. „Každoročně investuje vídeňské letiště 5 až 6 milionů eur do fondu ochrany životního prostředí. Tento fond mohou využívat obce v okolí letiště,“ říká Franz Jöchlinger, který na letišti pracuje.

Kromě toho letiště využívá a rozvíjí systém Airport Collaborative Decision Management, který umožňuje propojení veškerých subjektů podílejících se jakýmkoli způsobem na přistávání, poježdění a vzletech letounů, prostřednictvím informačního systému a v důsledku toho lepší vedení letounu v rámci celého cyklu. „Systém Airport Collaborative Decision Management zkracuje dobu stání taxíků na letištích a tedy i emise CO₂,“ říká Manuela Knotek z vídeňského letiště.



Úhrnem řečeno, Vídeň se zavázala k dekarbonizaci letiště a jeho okolí s využitím celé řady prostředků. Ty ostatní budou představeny ve sborníku „best of“ dokumentů, který bude finálním výstupem projektu dAIR a bude podrobně popisovat všechny osvědčené postupy zjištěné během tří let trvání projektu. 