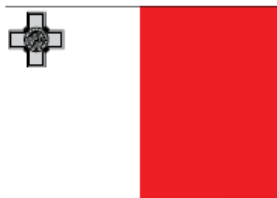




The D-Air Experience

Alexandra Ellul
Project Manager
Transport Malta



*INTERREG IVC Programme - Cohesion Policy 2007-2013
Innovations and Environment Regions of European Sharing Solutions*

This project is part-financed by the European Union
European Regional Development Fund
Co-financing rate: 85% EU Funds; 15% National Funds

Investing in your future



Joining the Consortium

- Networking
- Organisation CV





Transport Malta

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Name: Transport Malta
Abbreviation: TM
Former Names: MMA,
ADT, CAD

Type: Public Body

Year Founded: 2010

Number of Employees:
554

Working Languages:
Maltese, English



Role

'TRANSPORT MALTA' is the Authority for Transport in Malta set up by Act XV of 2009 which brings together the Malta Transport Authority, the Malta Maritime Authority and the Civil Aviation Directorate. TM standardizes and regulates all modes of transport (road, sea and air) and is responsible for the public transport system. The implementation of all government transport policies fall under TM's remit. Transport Malta falls directly under the auspices of the Ministry for Transport and Infrastructure.

Objectives and Policies

The Government shall endeavour, through the Authority, to achieve the following main objectives and policies:

- develop integrated transport policies aimed at achieving modal shifts that favour public transport and non-polluting strategies;
- ensure the development of an efficient and socially sustainable public transport system in Malta;
- promote the maritime and civil aviation facilities of Malta and the registration of ships and aircraft under the Maltese flag;
- promote policies that favour the development of Malta as a maritime hub in the Mediterranean and as an entry-port to the European Union;
- encourage measures for the development of civil aviation and ancillary services, and in particular of air transport services of both passengers and cargo;
- ensure that the administration, services and operations of ports and yachting centres in Malta are more efficient and cost-effective;

Areas of interest:

- Deployment of Electromobility infrastructure, including the installation of RES infrastructure to power the electrification of transport in Malta
- Sustainable mobility
- Intelligent Transport Systems
- Real time information services
- Virtual connections between the various transport hubs



Transport Malta

What makes us good partners?

- As the national regulator for all modes of transport, TM has the authority to deal with and implement high-level transport policies in all modes of transport be it passenger, freight or tourist services;
- TM has the operational control of Government Transport Infrastructure;
- Sector wide knowledge of transport and related horizontal policies;
- A flexible English-speaking workforce;
- Wide experience in EU funded projects.

Previous EU projects: (excluding European Regional Development Funds)

- > *Life+:* DEMOEV – Demonstrating the Feasibility of Electric Vehicles towards Climate Change Mitigation (2011-ongoing)
- > *Op Italy-Malta 2007-2013:* PORT-PVEV – Demonstrating how to make ports more energy efficient and demonstrating the use of electric mobility in port areas (2012-ongoing)
- > *Op Italy-Malta 2007-2013:* STREETS – Integrated Strategy for Sustainable Transport (2012-ongoing)
- > *INTERREG IVC:* D-Air – Decarbonising Airport Regions (2012-ongoing)
- > *Programme MED:* MEDNET – Mediterranean Network for Custom Procedures and Simplification of Ports Clearance (2012-Ongoing)

Contact Person

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INTERREG IIIA: CAVALGO (2004-2008)

Life+: Protection of bird habitat – Yelkeoun Shearwater (2006-2010)

TEN-T: MOS-East MED (2006)

TEN-T: MOS-West Med (2006)

TEN-T: Short Sea Shipping Promotion Centre (2006)

TEN-T: Surveys and Geo Technical Studies of Marine Facilities (2006-2008)

Interreg IIIC: PAGUS (2004-2007)

Interreg IIIB: CYRONMED (2004-2006)



D-Air Consortium

D-AIR Partners



The D-Air Project

Aim: convert airports into **environmentally sustainable transport hubs** by addressing:

- surface accessibility to airport zones;
- airport operator activities.

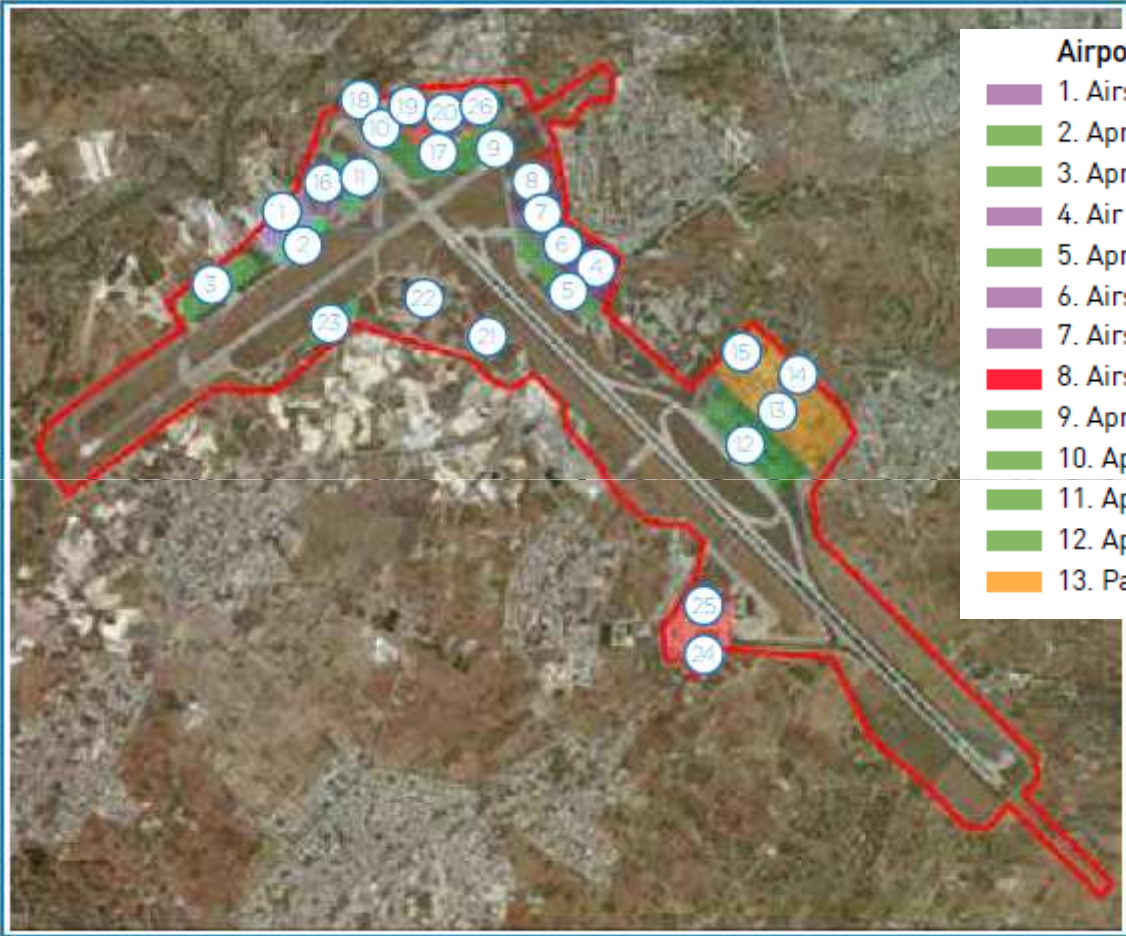
End result: Implementation Plan to be endorsed by national decision makers; to be followed after the termination of this project to create a truly decarbonised airport region.

Method at PROJECT Level:

- *Study Visits:* Each Partner (11 Airport regions) hosted a Study Visit in which other partners were shown measures that are currently being implemented in the different airports to minimize carbon emissions within the airport region.
- *Best Practices:* From measures shown during study visits, a number of practices were selected and proposed by the entire partnership as Best Practices to be proposed at EU Level.



Implementing the Project



- Airport Area of Influence**
- 1. Airside Operations
 - 2. Apron
 - 3. Apron
 - 4. Air Cargo Terminal
 - 5. Apron
 - 6. Airside Operations
 - 7. Airside Operations
 - 8. Airside Operations
 - 9. Apron
 - 10. Apron
 - 11. Apron
 - 12. Apron
 - 13. Passenger Terminal
 - 14. Car Parks
 - 15. Offices
 - 16. Airside Operations
 - 17. Airside Operations
 - 18. Airside Operations
 - 19. Airside Operations
 - 20. Flight Schools
 - 21. Airside Operations
 - 22. Airside Operations
 - 23. Apron
 - 24. Airside Operations
 - 25. Airside Operations
 - 26. Air Cargo Terminal



Implementing the Project – ENGAGING THE STAKEHOLDERS

1st Stakeholder Forum



Implementing the Project

Step 5: Data Gathering Process

- Desk research: National Policies, any available data
- One-to-one meetings
- Site Visits



Implementing the Project

Step 6: Carbon Footprint

1. Airport operations : ground handling, airline catering, provision of fuel services to aircraft.
2. Aircraft emissions : unassisted aircraft movements, auxiliary power units, engine tests – excluding take off and landing.
3. Airport activity: activity within the boundary not directly related to the airport, such as aircraft maintenance.
4. Ground transport : employees, passengers and visitors.



Implementing the Project

CARBON EMISSIONS (2016 SCENARIO, TOTAL EMISSIONS) IN ORDER OF SIZE

Use of:	Used by:	Used for:	kgCO ₂ e/a	% of total
Fuel	Aviation	Ground Movement	12,908,182	32.5%
Fuel	Aviation	Auxiliary Power	4,249,495	10.7%
Electricity	MIA Tenants	HVAC	3,154,688	8.0%
Electricity	MIA	HVAC	2,772,270	7.0%
Fuel	Public Transport	Land Transport	2,770,445	7.0%
Electricity	MIA Tenants	Light and Operations	2,581,109	6.5%
Electricity	MIA	Light and Operations	2,268,221	5.7%
Fuel	Other employees	Land Transport	2,188,869	5.5%
Fuel	MIA Tenants	Heating	1,689,303	4.3%
Fuel	Visitors	Land Transport	1,223,597	3.1%
Fuel	Outbound tourists	Land Transport	1,132,312	2.9%
Fuel	Tourist Coaches	Land Transport	701,676	1.8%
Fuel	Tourist Taxis	Land Transport	522,373	1.3%
Fuel	Aviation	Engine Testing	414,141	1.0%
Electricity	Airline Catering	HVAC/Refrigeration	332,442	0.8%
Fuel	Airline Catering	Heating	235,954	0.6%
Fuel	MIA Employees	Land Transport	235,145	0.6%
Fuel	MIA	Passenger/Cargo	144,546	0.4%
Water	MIA Tenants	Potable/Grey	53,714	0.1%
Fuel	Airline Catering	Land Transport	49,743	0.1%
Water	MIA	Potable/Grey	21,557	0.1%
Water	Airline Catering	Potable	13,610	0.0%
			39,663,391	100.0%

Implementing the Project

2nd Stakeholder Forum



Implementing the Project



Implementing the Project

LED Installations: Arlanda Airport

LED installations today:

- 2 car parks
- Garage for heavy vehicles
- Workshops
- Check-in desks
- Boarding desks
- Security control
- Technical rooms ventilation
- Down-lights for heights of 3m, 5m and 8m
- Spotlights in stores
- Changing light sources in old armatures

10,000 LED units installed:

- >50% lower installed load
- Reduced energy costs by €266K /year
- Lower service and maintenance costs
- Failures less than 0.1%
- Better interior climate - less hot
- Satisfied customers



Implementing the Project

Dedicated Route Bus: Barcelona Airport

- Many airports have dedicated public transport routes
- These serve both passengers and employees
- Often connecting main tourist areas with the airport
- Actual vehicles used are environmentally-friendly, in terms of technology (engines, fuels etc.)
- Ties in very well with company travel plans



Implementing the Project

Step 7: Recommended Measures

Focused on 2 priorities:

- Reducing or neutralising demand
- Increasing Energy Efficiency
 - Motivation and behavioural changes
 - Efficiency in the use of electricity
 - Transport
 - Renewable Energy
 - Efficiency in the use of water
 - Aircraft



Results (Local)

Outputs (Local):

The Regional Imple

Established the Airport Boundary Stakeholder Forum

TM will use measures to implement measures in transport to reach
Climate Change and Energy and Air Quality targets

MIA to implement measures that will lead to ACA



Results

Outputs (Project Level):

Best Practices selected from Malta:

Buildings with energy certification (Sky Parks)

Bus on demand (Airport/Hotel shuttle service)

Electric vehicles and Charging Stations (DEMOEV and PORT PVEV Projects)

Express Bus (X Route)

Solar Farm (MIA roof top)



Thank You



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