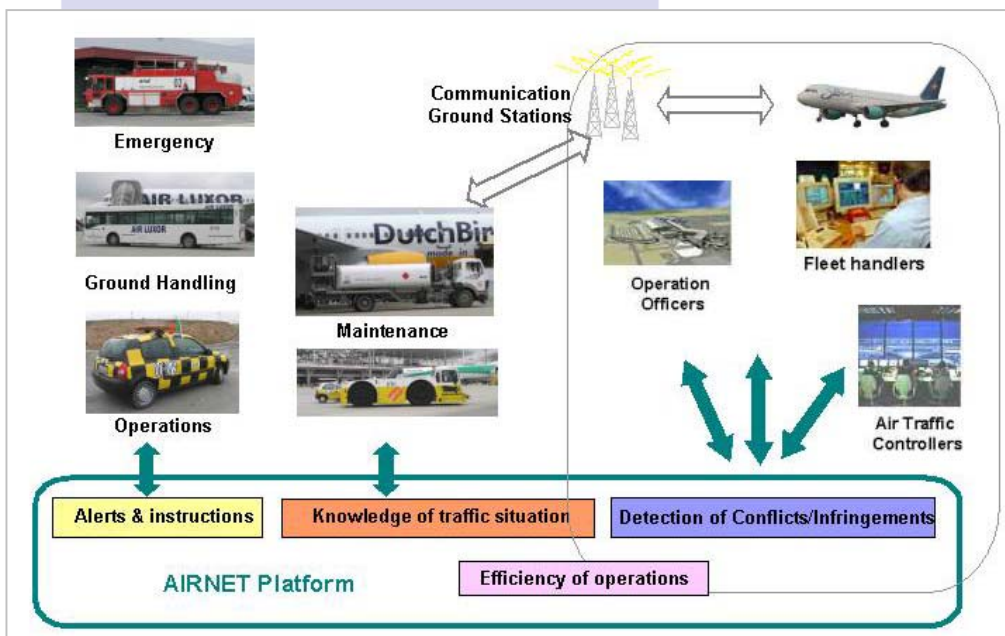


## AIRNET

### *Airport Network for Mobiles Surveillance and Alerting*

**AIRNET** aims at developing and experimenting an EGNOS low-cost platform for the surveillance, control and management of airport vehicles. This platform will implement the recommendations of **EUROCONTROL** for **A-SMGCS** (Advanced Surface Movement Guidance and Control systems) and will also implement a set of innovative wireless communication networks.

A first prototype of the system will be deployed at **Porto** airport (Portugal) for an extensive validation campaign.



#### More information:

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## Objectives

The continuous and steady growth of air traffic leads to an escalating number of accidents and incidents on surface movements. In case of bad meteorological conditions or low visibility, since the surveillance and control of movements are based mostly on the "see and be seen" principle, airport stakeholders have little or no knowledge of ground surface traffic, thus leading to ground movement hazards (risks of collisions, runway incursions and incursions into dangerous & restricted areas).

Airport congestion is also becoming an increasing problem : it is already a limiting factor at several European major airports. This results in significant delays and causes frustration and difficulties both for passengers and all aircraft operators. In case of crisis situations (e.g. traffic overload or air traffic control disruption), the management of the passengers flow becomes chaotic, thus leading to potentially hazardous situations.

The objective of **AIRNET** project is to define and demonstrate the feasibility of a low-cost innovative technical solution for the safe operation of mobiles (vehicles and aircrafts) on the airport movement area in all visibility conditions, as well as for the management of these mobiles by the different stakeholders (air traffic controllers, airport operations officers, ground handlers). This solution will be applicable to small and medium size airports and will rely on location-based and communication-based services.

Note: Similar solutions are already implemented in large airports, but only in the manoeuvring areas due to their high cost.

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Duration: **36 months**  
Project Cost: **2.671.261 euros**  
Contract Type: **STREP**  
End Date: **31/12/2006**  
Project Funding: **1.246.996 euros**

### Participants:

- |   |          |
|---|----------|
| • M3 SYSTEMS  | FRANCE   |
| • ANA - AEROPORTOS DE PORTUGAL, SA                  | PORTUGAL |
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| • C.N.S. SYSTEMS                                    | SWEDEN   |
| • INTUILAB  | FRANCE   |
| • ALITEC  | FRANCE   |

## Description of the work

The objectives of **AIRNET** are to :

- Improve airport users safety (*Runway Safety*) on all the areas of the airport, by providing essential and reliable information to relevant airport stakeholders.
- Improve the efficiency of operations (*Congestion Control*), by providing services to airport operators to optimise the flows of vehicles on the apron area and to cope with crisis and emergency situations.
- Improve airport security, by alerting airport stakeholders when an intrusion of non-authorised vehicles in all airport areas occurs.

