

An Irish company wanting to form consortium or join existing consortium for a project under the FP7-2010 call

Area 7.1.1.3 Green Air Transport Operations

Topic *AAT.2010.1.3-2 Airports*

Proposed Project Description:

The objective of this project is twofold; (a) to monitor and model the air quality and noise in the vicinity of an airport and (b) to determine the response of the local community to environmental pollutions from airports.

Work Package 1: Monitoring and Modelling Environmental Pollutants

This work package will see the development of an environmental pollutant monitoring system (air and noise) that integrates real time data with model predictions. Meteorological conditions (wind speed, wind direction, humidity, precipitation etc.) will be correlated with the occurrence of environmental pollutants in addition to the operations at the airport. This data will be managed via a 3G system that has the capability of real time feeds to a control centre where environmental maps will constantly be updated. Using this information it will be possible to determine if limit values have been exceeded and the cause of the infringement. Hence, it will be possible to determine if the infringement is dependent on a particular flight path or certain meteorological conditions etc, as all variables will have been monitored. This will then lead to the development of appropriate specific mitigation measures. There will be potential to make this information accessible to the general public via web-based access.

Work Package 2: The Response of the Local Community

The data acquired in the first work package will be used to assess the local community's response to noise and air quality. This may also involve the development of an integrated air/noise pollutant indicator. An integral part of this study will be to engage with residents living near the airport. Some psycho-acoustic phenomena could also be included in the analysis, including an evaluation of potential 'soft' mitigation measures e.g. a change in

the perceived airport environment, masking of noise etc. Different public responses across different Member States will also be evaluated to compare the extent of annoyance across Europe.

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