

AIRSECURE

AIRSECURE – Risk-based detection and protective filtration system for airports against airborne chemical, biological or radiological hazards

The European Commission, Industry and Research are working together to make your airport safer

Airports are vital to the social and economic development of European countries. To help maintain the free flow of passengers and goods effective security measures are needed to improve the protection against new terrorist threats. AIRSECURE was a FP6 European Research project that developed a high security detection and filtration solutions against airborne CBR threats at airports. The two year project started in Sept 2005.

AIRBORNE THREATS

Possible scenarios for terrorist chemical/biological attacks include point releases of threat agents in various locations in a terminal, or releases directly into the air handling systems serving these spaces. Attacks may include:

- Fast acting chemical agents causing victims' symptoms to appear within seconds to minutes. Examples of such agents include nerve agents and toxic industrial chemicals (TICs).
- Slow-acting biological agents causing symptoms to appear after an incubation period of a few days. Examples are variola virus causing smallpox and spores of *Bacillus anthracis* causing anthrax.

The airborne threat agents are gases, vapours or inhalable aerosols which are transported and dispersed with the indoor air movements.

AIRSECURE system

The AIRSECURE system forms a reliable, user friendly and cost-effective solution to protect airport passengers and workers against airborne biological, chemical or radiological hazards. The modular system is realized based on risk analysis and it gathers together all the important aspects of protection.

AIRSECURE benefits

The AIRSECURE system will help to deter, withstand, and recover from possible terror attacks. The improved filtration and detection system can be used to control the spreading of naturally occurring, accidental, or intentional releases of biological and chemical pollutants. The enhanced filtration will also effectively remove outdoor pollutants such as submicron particles, volatile organic compounds, odours and ozone from the supply air resulting in comfortable and healthier indoor air.

Participants

Lifa Air Ltd.
Finland
Coordinator of the project
www.lifa.net

Dekati Ltd.
Finland
www.dekati.fi

LVS Koeltechnieken & Airco
Belgium
www.lvs-koeltechniek-airco.be

Blancon Enviro SL
Spain
www.blancon.net

Smiths Detection – Watford Ltd
UK
www.smithsdetection.com

TNO
The Netherlands
www.tno.nl

VTT
Finland
www.vtt.fi

Contact person:
Vesa Mäkipää, Lifa Air
email: vesa.makipaa@lifa.fi



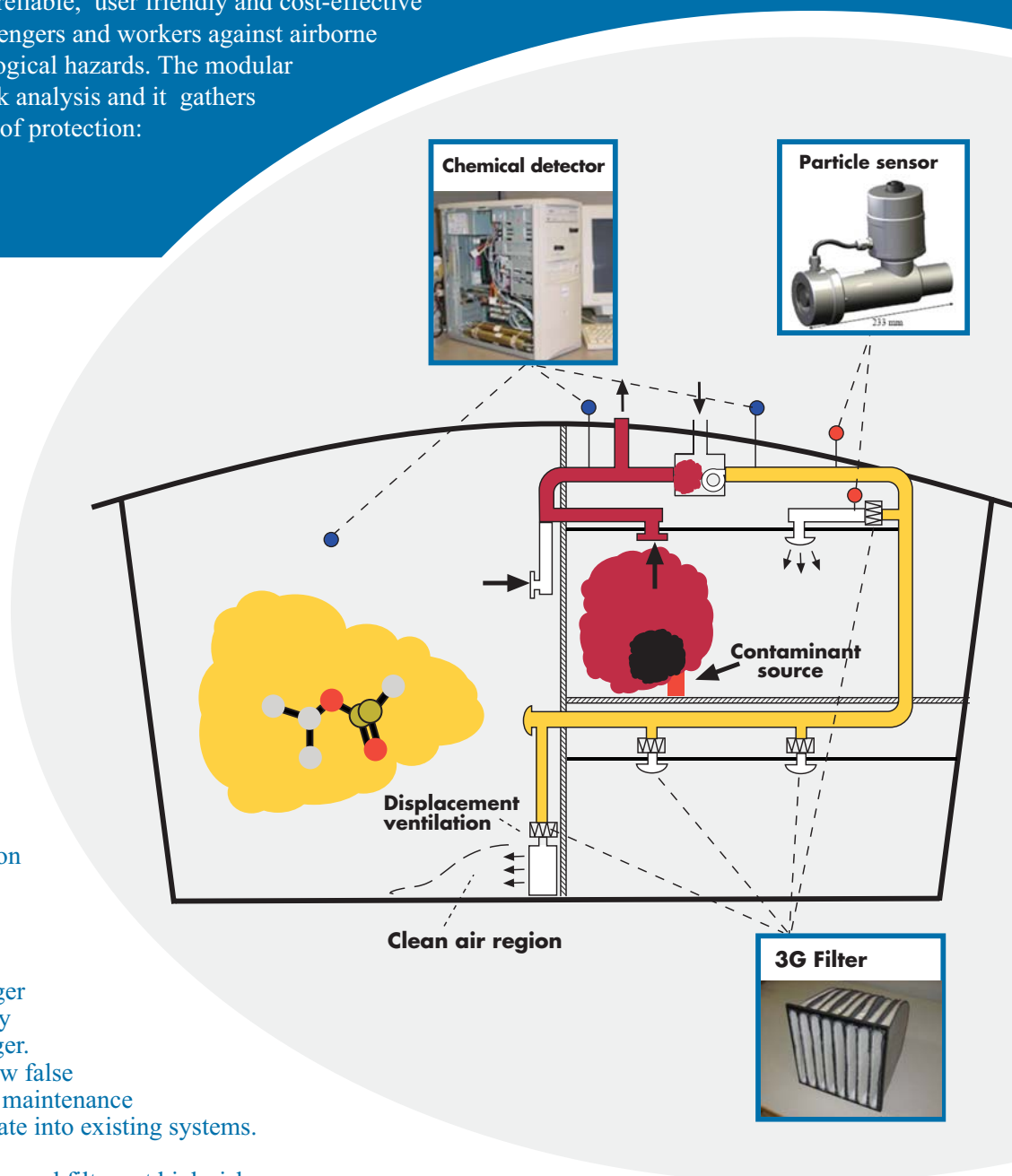
AIRSECURE

Safety through filtration and detection

AIRSECURE SYSTEM

AIRSECURE system forms a reliable, user friendly and cost-effective solution to protect airport passengers and workers against airborne biological, chemical or radiological hazards. The modular system is realized based on risk analysis and it gathers together the important aspects of protection:

- Risk analysis methods for airborne threats in confined spaces.
- Combination of high efficiency particulate filtration with novel gas phase filtration to an advanced filtration unit that offers continuous and efficient protection against chemical and biological hazards.
- Low-cost particle detectors to monitor the performance of the filters to ensure the high protection level at all times.
- Utilization of distributed chemical detectors with central monitoring, to trigger alarms and to ensure timely response to imminent danger. The detectors have very low false alarm rate, they need little maintenance and they are easy to integrate into existing systems.
- Distribution of the detectors and filters at high risk areas where protection is mostly needed.



PARTICIPANTS

