



AGENZIA NAZIONALE
PER LE NUOVE TECNOLOGIE, L'ENERGIA
E LO SVILUPPO ECONOMICO SOSTENIBILE

BONAS

“BOmb factory detection by Networks of Advanced Sensors”

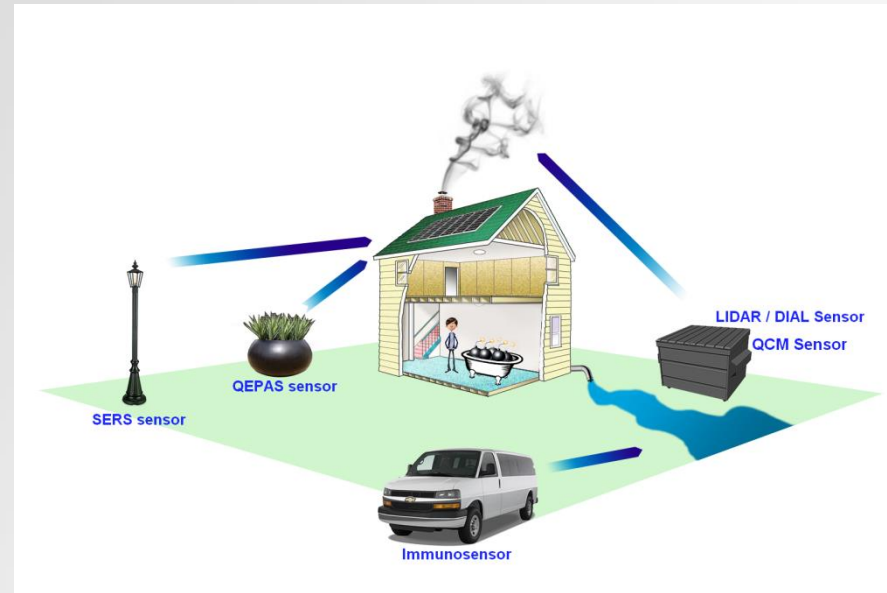
Project BONAS

“BOmb factory detection by Networks of
Advanced Sensors”

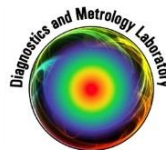
N° 261685 Call FP7-SEC-2010-1

Funding scheme Collaborative project

Dr. Antonio Palucci
Head of Diagnostics and Metrology Laboratory
ENEA Frascati Research Centre



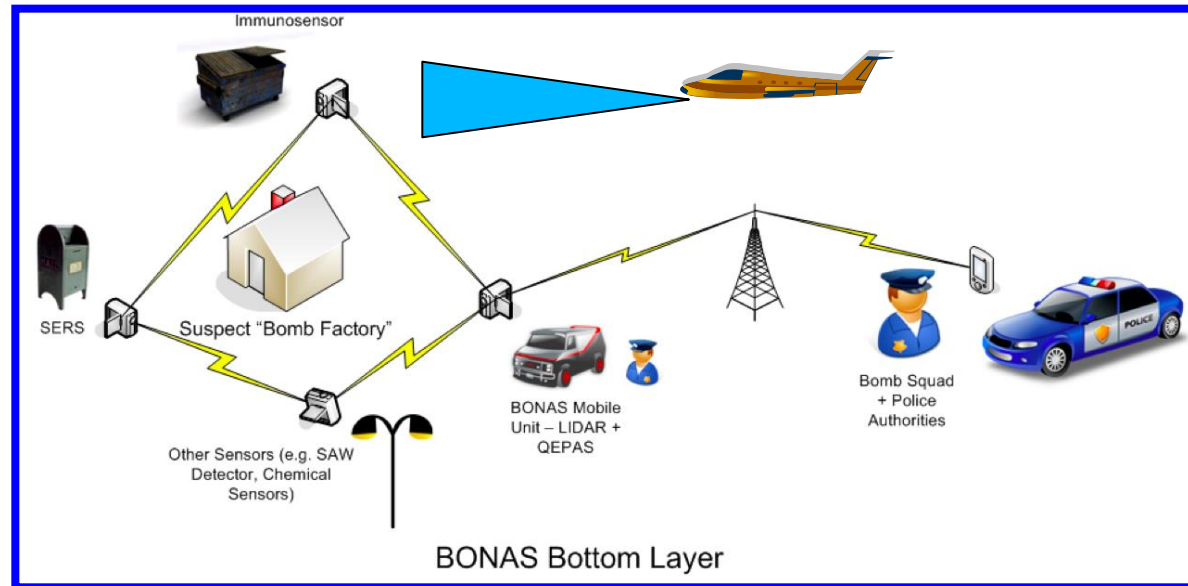
BO.NAS



The BONAS's approach

The aim of **BONAS** project is to design, develop and test a novel wireless sensors network for increasing citizen protection and homeland security against terrorist attacks, in particular against the threat posed by **IED** devices.

The sensor network will focus on the detection of traces of precursors used in **IED production** (particulates, gases and/or waterborne) present in the environment surrounding the vicinity of a “bomb factory”. The different sensors are specifically designed to be deployed in sensitive locations and easily camouflaged.



Starting date 01/04/2011

Duration 42 months

Presently completed

Project Cost € 5.074.931,01

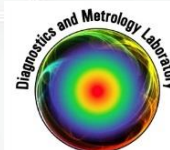
EU fund € 3.488.359,81

How to Find Bomb Factories Joint Experimental Demonstration of Networked Sensors

The demonstration was performed at the test site of the Swedish Defence Research Agency 40 km south of Stockholm [September 24-25, 2014]



10 Sensors
2 C&C systems



BONAS Achievements



- **Sensors**

- Lidar
- QEPAS
- Handheld Raman
- Electrochemistry
- QCM

High sensitivity and high discrimination rate

- **BONAS products**

- 26 Deliverables
- **5 Confidential UE**
- **7 Restreint UE**
- **1 Commercial product**

BONAS

- **Advisory Board**

- 10 members (7 States)
- 2 Classified meeting

- **Priority list of Target compounds**

- 29 Precursors (**16 Tested**)
- 15 Explosives (**5 Tested**)

- **Tests**

- Pratica di Mare Trials, Rome Italy (June 2014)
- FOI Grindsjön, Stockholm, Sweden (September 2014)

