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# Development of a real-time information and monitoring system to support the risk assessment of nanomaterials under REACH

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# **Objectives:**

By developing a real-time information and monitoring system NanoMonitor supports the risk assessment of nanomaterials under REACH with the aim of:

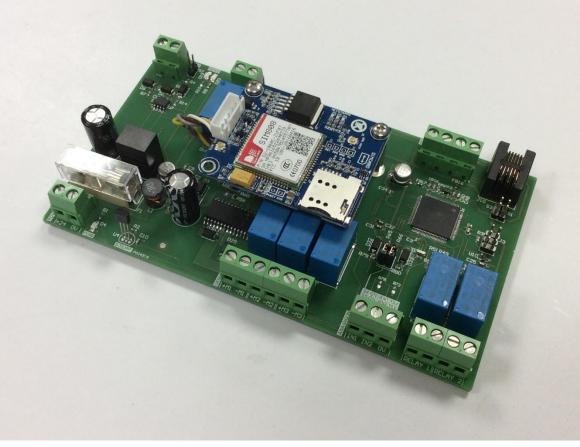
- improving the use of environmental monitoring data to support the implementation of REACH regulation
- promoting the protection of human health and the environment when dealing with engineered nanomaterials (ENMs).

## **Expected Results:**

standard operating procedures to collect and analyze ENMs in complex industrial, urban and natural environments

#### new low cost monitoring station propototype for the measure of indoor and outdoor concentrations of ENMs

- detection of particles ranging in size from 10 to about 700 nm
- geolocated real-time information on ENMs concentrations
- integrated plug and play solution designed for long term sampling and monitoring ENMs concentration
- remotely configurable settings, readings and transmissions periods
- minimum maintenance requirements
- Stations are currently being assembled
- First station to be launched in Paterna, Valencia in September 2017



**Communication Module** 

### Implementation stage:

Preparatory stage:

Selection of ENMs,

information and data quality

requirements according to

REACH and geographical

coverage, sampling

locations and frequency.

Development of a real-time information and monitoring system including a web-based application and the design and implementation of an autonomous monitoring station prototype.

- 4 companies and 4 strategic location in the existing air quality monitoring network of the Valencian Community
  - · Satellite monitoring station to be used upon request by any interested stakeholder

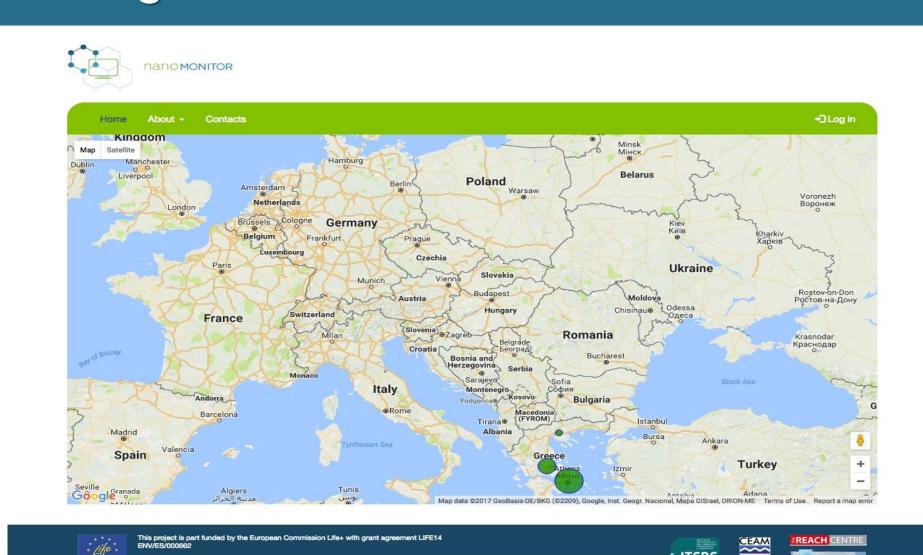
### Outcomes:

- Software application Database
- Monitoring station prototype Case studies
- Standardised protocols
- and specific guidance Webinars, workshops and

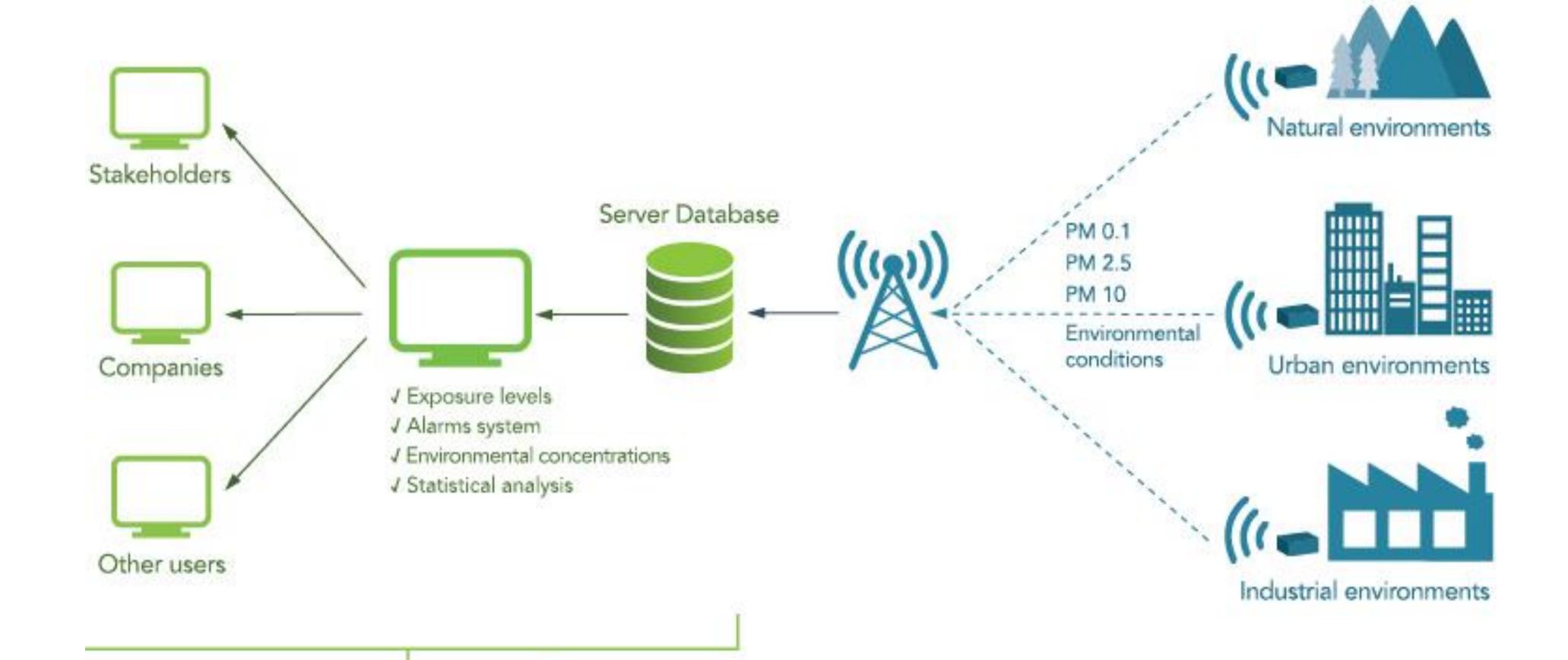
informative material

# a software application to store, exchange and manage data on the concentration of ENMs

- multiple exporting data formats
- real time multiparametric graphical information
- access from smartphone and tablets
- high resolution maps
- easy data management option, including data storage, comparative analysis and modelling.
- Demo version of web portal available
- Administration web console launched



Project results will be disseminated to a large community of SMEs, stakeholders and competent authorities at a regional, national and EU level.











NanoMONITOR software



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