

Instrumental development

Objective: to develop technological equipment and software tools to detect and then collect, transfer, integrate and use massive data sets



Things like environmental monitoring, e-agriculture, e-health and volcano monitoring require the development of new technologies to collect, transfer, integrate, and use **massive data sets**.

The site offers scientific and technical skills covering many of the problems of basic and applied research related to connected objects and Big Data. The work already undertaken on these issues at several research laboratories for their own needs and within the framework of CPER projects constitutes the foundation of a scientific community to respond to the issues of CAP 20-25's four scientific focusses.

The multi-disciplinary "instruments" focus aims to **bring together** this expertise with stakeholders in strategic challenges, with the priority of developing upstream research:

- On sensors and wireless sensor networks, by studying and developing innovative **sensors** of interest to the CAP 20-25 scientific challenges, studying and developing innovative **communicating nodes**, and studying and developing innovative **wireless communication protocols**.
- On Big Data, by developing or experimenting with new methodological approaches to **optimize Big Data processing, analysis and quality**.

STEERING COMMITTEE

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