E-HEALTH AND EPIDEMIOLOGICAL MONITORING

The current context regarding health is characterised by an aging population, climate change, greater urbanisation with increasingly frequent population movements, the emergence of new risks and threats (cyber-terrorism, extreme weather events, etc.) and, lastly, a reduction in public funding.

Digital technologies are gradually spreading through the health system and affecting some key issues:

* how to ensure access to medical technologies for every sector of the population
* how to deal with an aging population
* how to help defend against epidemics
* how to assist the developing countries.

Moreover, certain sectors of e-health exploit satellite systems: Earth observation satellites (e.g. Spot, Envisat and Pleiades), radiocommunications (e.g. Inmarsat, Astra and Eutelsat) and positioning/navigation (e.g. GPS, GNSS and Galileo).

The projects in which MEDES participates have generally been funded by CNES, the European Commission, ESA, or the WHO. MEDES also signs cooperation agreements with SMEs proposing projects.

For these projects, MEDES acts as a laboratory for innovation and incubation, and offers the following services:

- Laboratories for tests and specifications,
- Assistance during deployment and evaluation phases,
- R&D laboratory for generic solutions,
- Integrator of solutions/Prototyping on request,
- Exploitation and transfer.

In this way, MEDES contributes to the development of applications for the benefit of society as a whole, services and technologies derived from the knowledge and experience acquired from space activities, in the fields of medicine, public health, biomedical instrumentation, and information and communication technologies.

MEDES has carried out numerous projects, many of which have provided lasting solutions.

Examples include:

* the remote medical consultation network in French Guiana,
* the ASTER epidemiological surveillance network for the French Defence establishment,
* the tuberculosis surveillance network in Georgia,
* the following ongoing projects: STIPP, DIABSAT, e-Medical-Link, Vecmap, and the tuberculosis surveillance network in Cameroon.