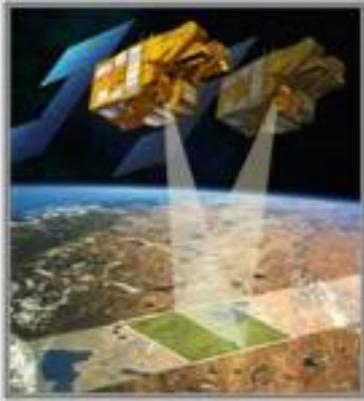


VG-Tropics (2013-2015)

An information system for managing animal health data in developing countries.



VG-Tropics aims to provide tools and services that significantly improve the monitoring of animal health in developing countries.

Date: 2013-2015

Funding partners: ESTEC, European Space Research and Technology Centre (Establishment of ESA, European Space Agency), Noordwijk, the Netherlands

Partners: MEDES, Avia-GIS (Agro-Veterinary and Analysis bvba, Zoersel, Belgium)

Context

In many developing countries, particularly in Africa, livestock is an important resource. It contributes to food security and to improving the quality of life in rural communities, and strengthens development of the economy.

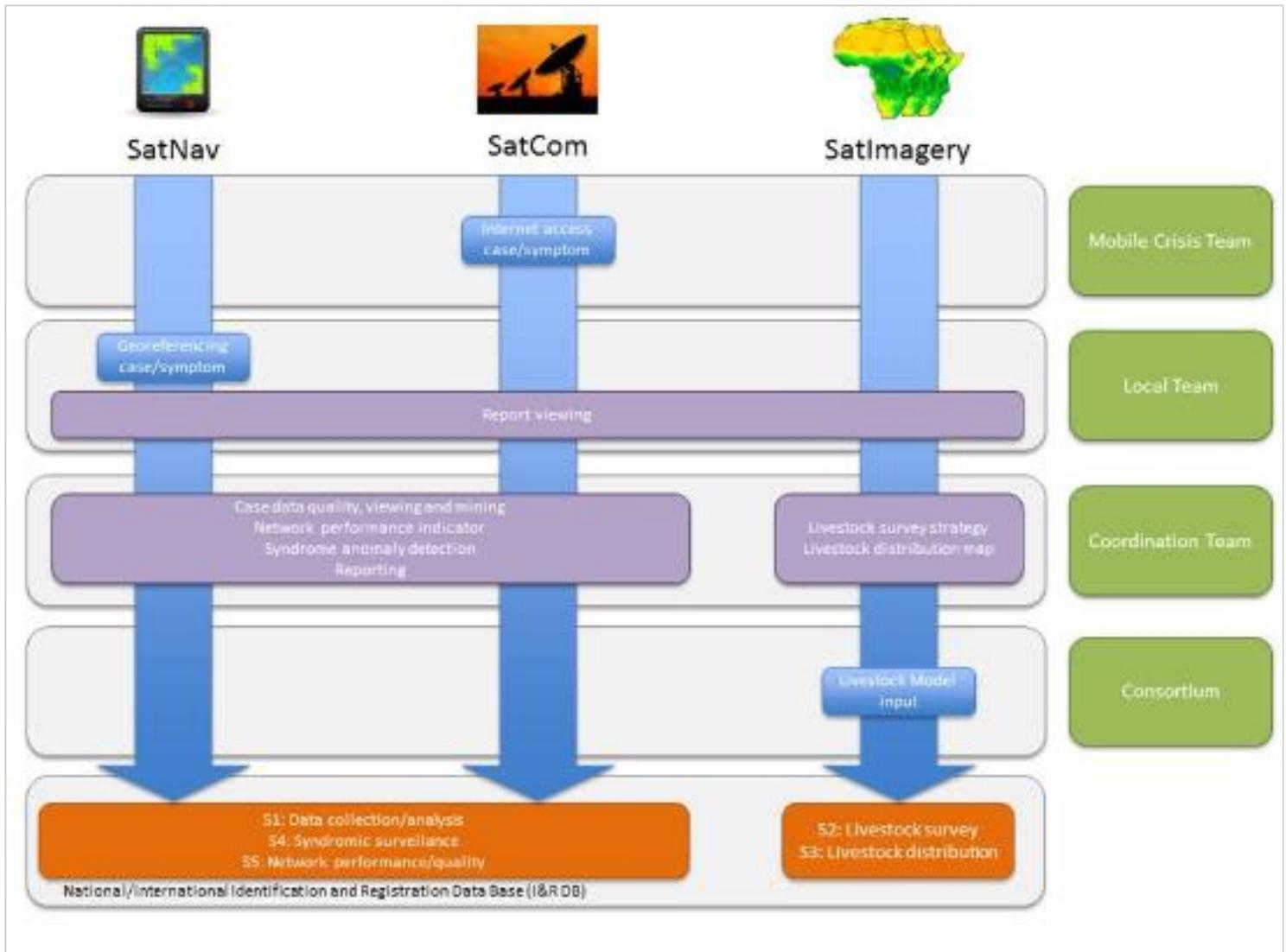
For this reason, early detection of infectious animal diseases and rapid implementation of control measures are of paramount importance to limit their spread and impact on animal health and production. It is therefore critical to improve communication channels so as to reduce the time between detection and response.

The availability of sufficiently accurate data on the distribution of livestock is essential for identifying populations at risk and obtaining more accurate impact assessments.

Providing tools that help optimise the planning of livestock censuses is important for achieving this goal.

VGTropics offers tools and services that significantly improve the monitoring of animal health in developing countries. The various systems aim to:

- * collect and analyse data,
- * plan systematic surveys of livestock,
- * provide updated livestock distribution models,
- * ensure syndromic surveillance,
- * monitor network performance and data quality.



VGTropics includes three satellite services that are essential components of the tools and services offered:

- * **Satellite navigation.** This enables reporting of health information and planned surveillance and control measures. GPS devices or smartphones with a GPS function are already in place or will be purchased for the VGTropics project.
- * **Satellite communication.** This is essential for improving the means of communication in isolated areas. The mobile crisis intervention teams will use the terminals provided to establish the network.
- * **Earth observation by satellite** forms part of the VGTropics survey services for livestock and livestock distribution, providing all the variables for the livestock distribution models, since livestock farming is closely related to environmental factors.

The users

Five major user groups have been identified, either based or operating in developing countries:

- * National veterinary services of the developing countries,
- * Projects funded by development aid agencies from developed countries,
- * Projects funded by non-governmental organisations (NGOs),
- * Projects funded by international organisations,
- * Pharmaceutical and veterinary industries working on pest control.

Implementation / Demonstration

To begin with, the different components of the system will be developed and tested individually:

- * Connectivity of the database,
- * Mobile applications and network operation,
- * Livestock distribution service,
- * Syndromic surveillance function.
- * The various components will then be integrated, and the interfaces, system operation and results obtained by the system, will be tested.
- * At the end of the demonstration project, a working VGTropics reference prototype will be available as a basis for development of tailored VGTropics solutions, as required by the market.

The system will be tested in Senegal, Zambia, Niger, South Sudan and Cape Verde.