

# African satellite deployment in fight against Malaria



## Background

For many years now, pharmaceutical giant GlaxoSmithKline (GSK) has been leading the fight to develop a vaccine against malaria, a disease responsible for more than a million deaths a year, mainly children.

This work has involved an investment to date in the region of US\$300 million and now, with the support of the Malaria Vaccine Initiative (PATH MVI) and funding worth US\$100 million provided by the Bill & Melinda Gates Foundation, the programme is moving into a period of extended trials in sub-Saharan Africa.

## The Challenge

This additional funding has helped the GSK-PATH MVI partnership acquire digital X-ray equipment which will be deployed at 11 different clinics, each situated in extremely remote parts of the continent (for many patients it will take days of walking to reach their nearest centre). The data gathered here will be used by GSK researchers to assess and monitor the health of up to 16,000 babies and infants over the course of the trials. The logistical problem facing the teams was how to get the X-rays and other clinical data collected at these clinics – spread across Burkina Faso, Gabon, Ghana, Kenya, Malawi and Tanzania – back to the main research team in Belgium.

With no fixed communications infrastructure – even power is often only available from generators – the project team was faced with the possibility of having to collect data in hard copy form – actual X-ray films and printed paper and post this back to base for inputting, collation and analysis. Given the time delays this would cause, and the fact that extremely advanced technology is being deployed across every other aspect of the programme, GSK decided that a more cutting-edge approach was required and approached GE - Satcom to develop what would be a world first in the healthcare sector.

## The Solution

The solution provided by GE - Satcom has seen VSAT satellite antennas installed at 10 of the 11 clinics, providing direct links to the GE - Satcom teleport and HQ in Germany and on, via a secure virtual private network, to GSK Biologicals' HQ in Belgium.

As a result, high resolution digital X-ray images and critical clinical data will be transmitted back to GSK's research team in seconds.

This breakthrough solution, developed in close co-operation with GlaxoSmithKline, forms a vital part in the overall infrastructure that will, over the course of the trial, capture and transmit as many as 4,000 chest X-ray images in the search for an effective vaccine against malaria.



GE - Satcom has two teleports, one at its HQ and operational centre in Backnang, Germany, the other in Leuk, Switzerland. It has a full time commercial presence in the Benelux, France, Poland, Switzerland and the UK.

GE - Satcom experts are available to answer your requests and to take your project from idea to operational reality.

### For further information please contact us:

T +49 7191 971 0  
info@gesatcom.com  
www.gesatcom.com