

## EXECUTIVE SUMMARY

Distribution of HIV/AIDS medicines is a complex logistical operation, but with the strong focus on granting access to Anti Retro Viral (ARV) medicines to HIV infected patients, access to these drugs are normally ensured. However, information management in the treatment programs, especially at the local level, has the potential to benefit from space-based solutions to further improve treatments. The UN Institute for Training and Research (UNITAR) Operational Satellite Applications Programme (UNOSAT) teamed with KeyObs of Belgium to see how two main actors working in the field of HIV/AIDS treatment programmes, the World Health Organization (WHO) and Medecins Sans Frontieres (MSF), could benefit from applications using space-based tools for their HIV/AIDS related program management. These applications focus on both satellite communication and geographic information systems, where satellite navigation and earth observation play a key role, and were developed through the support of the European Space Agency (ESA) in the GISA project (Geographic Information Support for AIDS/HIV treatment programmes).

The findings show that there is a need to both improve data collection, including geographic data management, and communication systems at the local level. This can indeed be supported by space-based tools. It is however important to keep a holistic approach so as to ensure that other health thematic areas can equally benefit from the developed solutions, thus ensuring synergy. Capacity building and training of local staff, was found to be essential for sustainability of the identified solutions and this was also confirmed through field missions at the two case study areas in Nigeria and Malawi. Activities need to have full support from the end users, namely the government of Nigeria and MSF in Malawi. Further support must be ensured at the province or district level, thus facilitating good working conditions at the local level.

While technological developments are moving fast, new solutions are possible. Current trends in desktop mapping and data transfer through simple communication means need to be taken into consideration for potential follow-up activities. With the positive input from the users of GISA, WHO and MSF, as well as local health workers, a solid user-base has been built. This could be further strengthened by combining results from GISA's sister-project SpaceDream. By further building on the close link to users, a scaled-up version of these projects may yield a significant impact for the beneficiaries, i.e. local health centres and their patients.