

# Satellite technology to increase regional airport capacity

By Benon Ojiambo

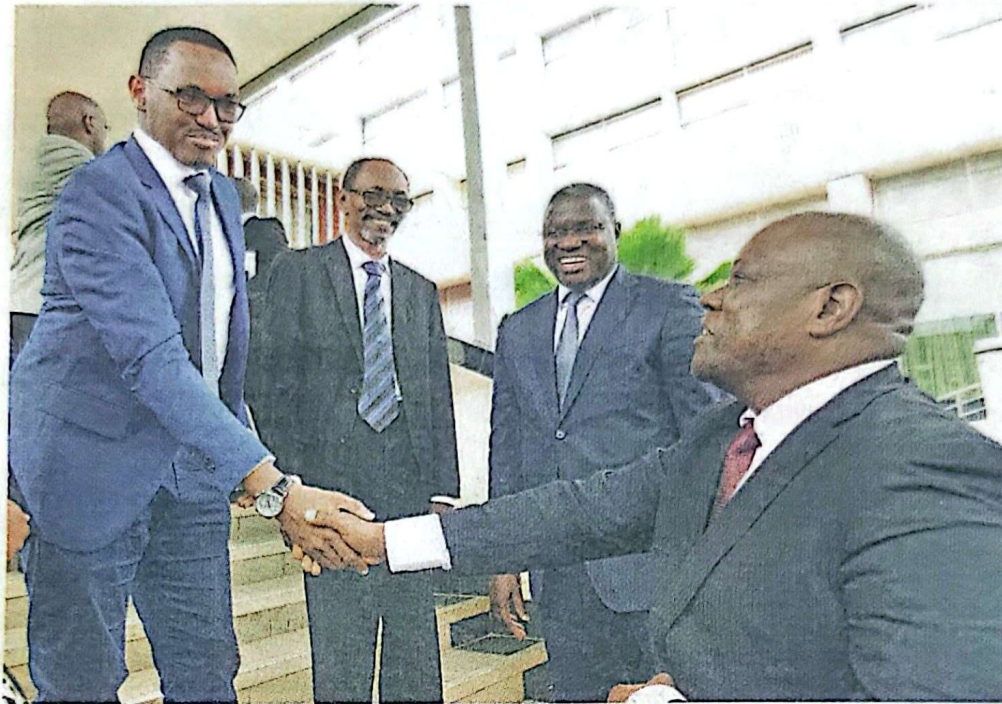
In December, all airports in the East African Community (EAC) are expected to adopt the implementation of the Satellite Based Augmentation System (SBAS).

SBAS are standard applications that are being developed for aviation enhancement and SBAS is important in the final phase of flights, like approach and landing.

According to Richard Ruhesi, the director of air navigation services at the Civil Aviation Authority, SBAS systems are used in communications between those on the ground and in the air, navigation that involves knowing where you are in relation to other places and aircrafts in the air, and surveillance, where those on the ground see where other aircrafts are.

Currently, the ground-based navigation system is used to manually support aeroplanes in landing, departure and surface operations. Ruhesi explained that currently, the conventional systems that are used in air navigation are ground-based.

"In the past, all airports were required to install systems on the ground, but with the development of satellites, many airports are now dependent on



State minister for works Aggrey Bagiire (right) with the EAC's Eric Ntagengerwa (left), Semou Diouf (second-right) and Sudan's Hayder Abdalla during the meeting at the Sheraton Kampala Hotel. Photo by Roderick Ahimbazwe

their signals," Ruhesi explained.

He was speaking during the opening of a four-day validation workshop organised by European Geostationary Navigation Overlay Service, and hosted by the Civil Aviation Authority at the Sheraton Kampala Hotel on Tuesday.

The workshop is conducting

initial validation of the preliminary programme proposal and benefits analysis and outcomes of the SBAS economic impact assessment, that shall lead to creation of the East African SBAS module.

The implementation of the Africa and European Union co-operation on satellite

navigation, has been going on since the adoption of the 2nd Action Plan (2011-2013) of the Joint Africa-EU Strategy (JAES) by heads of states and governments of Africa and Europe in 2010.

The 26th Assembly of the African Union (AU) also adopted the AU Space Policy

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and Strategy in recognition of the key role of space technology for the development of Africa, in early 2016.

The AU Space Policy and Strategy also recognises, in a particular way, satellite navigation systems and their applications to a wide range of economic sectors, especially in the field of transport.

Experts have said the current air navigation system's capacity and efficiency in Africa, requires

to be re-visited, if Africa to benefit from the agreed-upon establishment of a single African air transport market.

Aggrey Bagiire, Uganda's minister of state for transport, said the implementation of SBAS in East Africa is expected to enhance the region's air transport in a number of ways that include increased runway capacity, to handle more landings and departures.

He also added that SBAS shall also increase aerodrome accessibility, as airports become more easily accessed from anywhere in the world, with the adoption of the technology.

Ruhesi further noted that implementation of this module is currently at different stages in different African countries.

In Tunisia, he noted, the module is already operational due to the country's proximity to the EU, while the programme is at the demonstration stage in South Africa.

In the eastern part of the continent, the project is at the validation stage. It is to be validated in the meeting.

"The meeting is a great step towards realisation of the module to the region," Ruhesi said.

The EAC set December this year as the deadline for adoption of this technology.