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Valued at \$19.49 billion, the African space economy employs a workforce of 19,000+ with the government sector leading tremendous growth opportunities in the industry. Projected to grow by 16.16% by 2026, the rate at which the African space economy is flourishing is beyond even Africa's GDP growth. Moreover, the industry is well aligned with the Sustainable Development Goals (SDGs) and thriving in an environment that hosts well over 400 technology hubs, quite a few of which have gained international recognition.

IEC Telecom has been steadily expanding its presence in Africa. We have been actively growing our distribution network across the continent, building fruitful relationships with regional service providers, and have opened a new service hub in Tunisia. With a 24/7 operating center, it is home to our technical development and customer support. Today, our network engineers, IT specialists, and diverse support team operate under one roof to fuel innovation and digital transformation in Africa and across the globe.

IEC Telecom believes in deeply immersing itself in the communities that it operates in. We believe that connectivity serves a greater social cause and paves the way towards prosperity. We are committed to supporting e-learning opportunities, e-medicine, and food security in Africa. With our satellite communications portfolio, we have been able to empower women's education in the Maasai community and remote settlements in Kajiado Central Constituency. In a region where less than 20%

of girls enroll in school, IEC Telecom saw an opportunity to provide connectivity services to enable Memusi Hope Foundation's education programme, which saw 21 students graduate in November 2022. From a lack of infrastructure in an isolated community to being able to access digital libraries and communicate with educators over videoconferences, it is heartwarming to build an avenue for more girls to access basic education over satcom solutions.

In the healthcare sector, our satellite-based connectivity solutions can enable governments, NGOs, and private healthcare institutions to extend their medical programmes to remote communities. This is a fantastic prospect in sub-Saharan Africa, which constitutes 13% of the world's population yet consists of merely 2% of its doctors. This skewed ratio can start to be balanced out with digital services – whether it is equipping field teams with telemedicine kits, creating access for consultations in real-

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time, or setting up health hubs and remote clinics in underserved areas.

IEC Telecom is also dedicated to delivering IoT solutions to the government sector for crop monitoring and predictive analysis. This is a great means to increase agricultural yields in a region that is facing a long-standing drought and has been severely affected by geopolitical circumstances. Compounded by the possibility that sub-Saharan Africa's population can double by 2050 and already 85% of the current population cannot afford a nutrient-rich diet, food insecurity is a matter of critical concern. According to the World Food Programme (WFP), there has been a 60% rise in acute food insecurity in East Africa and a nearly 40% rise in West Africa – meaning that a lack of food is putting lives in immediate danger.

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Presently, satellite services are indispensable in rural and remote areas, where 30% of households rely on them. Moreover, 20% of households across Africa depend on satellite services for telephone and internet access.

According to the African Space Industry

Annual Report 2019, satcom generates \$6.5 billion in Africa annually. Besides bridging the connectivity gap, satellite communications deliver opportunities for digitalisation – and, therefore, increasing levels of economic and social development.

Mobile missions for humanitarian operations and government programmes are the norm in Africa. This necessitates a multi-channel approach for connectivity services. As such, seamless network switches and hybrid systems are gaining popularity – from GSM to satellite communications in areas where coverage is limited or unavailable. Network management solutions, such as OneGate by IEC Telecom, blend a few networks under one umbrella, automatically routing traffic over the most cost-effective link. This enables continuous connectivity while saving costs.

Business continuity is a key priority for the satcom sector. Besides communications, it is also about the ability to run digital processes no matter where operations take place. MSS terminals that are commonly used for mobile missions operate on L-band (up to 700Kbps) and will not be able to support applications designed for GSM networks. Recognising this trend, IEC Telecom delivers a whole portfolio of optimised applications that can be used under 90Kbps – from videoconferencing for e-learning and public service delivery to remote CCTV surveillance and telemedicine. ■

Looking ahead: With increasing LEO technology adoption, the market dynamics of Africa will change significantly. Presently, Starlink is available in five countries and more roll-outs are expected soon; OneWeb offers services above 25' N and below 25' S and the coverage is expected to span the whole continent by the

end of the year.

At \$7.3 billion value, the satellite ecosystem in Africa is geared towards increasing its own satcom capacity. It is expected that Africa will have launched at least 110 satellites by 2024. As of 2022, 13 African countries have manufactured 48 satellites.