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And Maintenenance Of KMBO Primary IMS Seismic Station In The Wake Of Covid-19 Pandemic

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In the wake of Covid-19 pandemic in Kenya, which apparently coincided with the long rain season, KMBO seismic station experienced rampant mains power outages and/or voltage fluctuations. Rainwater dripped into the tunnel and caused short-circuiting and burning of electrical sockets. Compounded with this problem was the fact that GCI UPS and batteries were not supplying back-up power to the GCI equipment as required until the mains power was either back or stable. Additionally, the GCI UPS batteries had been set to very high threshold such that connection is lost whenever the GCI UPS battery capacity drops to 96%. This rather high threshold in the GCI UPS battery capacity led to numerous communication and data outages and gaps with subsequent IRS and outage tickets from PTS and Hughes Network Systems LLC (the PTS GCI contractor) respectively. Operation and Maintenance was worsened by cessation of movement in and out of Nairobi Metropolitan area imposed by the President of the Republic of Kenya on April 6, 2020.
During SnT2021, we will present steps taken to ensure operation and maintenance activities for optimal station performance, demonstrate with, case examples, performance of GCI UPS causing the rampant communication outages and how this problem was resolved.

Promotional text

This paper presents the challenges in O&M of the remote IMS KMBO seismic station in the wake Covid-19 pandemic and the steps taken to ensure O&M activities for optimal performance of the seismic station

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