

INTERVIEW WITH

PROF. MEOLI KASHORDA, CEO OF KENET

Meoli Kashorda is a champion of African R&E networking. He became CEO of the Kenyan NREN, KENET, in 2008 and served as a member of the Board of the UbuntuNet Alliance from 2008 - 2016. The Kenyan NREN is based in the heart of the thriving East African telecommunications market, in Nairobi. We caught up with Prof. Kashorda before he travelled to join TNC18 in Trondheim as a key note speaker (Tuesday Plenary 11-12:30).

Meoli, the theme of this year's TNC is "Intelligent networks, cool edges?" – how would you describe KENET's cool edges these days?

In Kenya, we have cool edges in the geographic reach, where KENET reaches remote sites via radio technology. Let me give you the example of the Broglio Space Center, located 35km from the coastal town of Malindi.

The centre has been operated jointly by the Italian Space Agency and the University of Rome since the early 1960s with partnerships with the University of Nairobi and the Kenya Space Secretariat. The centre, which also operates as a fully-fledged remote sensing station, was originally connected via satellite links only. The challenge was to upgrade this site to broadband terrestrial capacity.

We initially connected the centre using last mile Wi-Fi radio provided by one of the mobile operators. This did not work well for the stable data-link required. Five years on, the fibre capacity was extended to reach Broglio and we lit the fibre at 1 Gb/s.

We are also proud to be able to connect other remote research centres and stations working mainly in the areas of public health, HIV and tropical medicine located in Western Kenya, mainly using last mile radio solutions. These centres are mainly in areas not

covered by commercial operators and we often need to construct radio masts.

These research centres collaborate with other centres in Europe and North America. Our links therefore enable the research data collection in these remote areas and reliably transport it to other labs in Kenya and collaborating centres in other parts of the world.

You have often discussed the challenges of R&E networks on the African continent. KENET is a long-standing success, what are the success factors for an NREN these days?

Thank you for using the word success! But we look at ourselves as being sustainable and we are proud to have been sustainable for the last five years. KENET is a relatively old NREN compared to other African NRENs. We were founded in 2000, but then had a second start in 2008. That is when we received Kenya government funding to expand our national network, data centre and international links to Europe. That started our journey to sustainability, because since then we can offer our member institutions high quality and uncongested connectivity and community cloud services.

In KENET, we have understood that the Kenyan government and our member institutions require us to have the capacity to execute connectivity



projects. That means that we have to have a critical mass of talented engineers. This talent is also needed when we are dealing with our many and helpful international partners. Any NREN needs to build its capacity to execute technical projects and the capacity to absorb help from collaborating partners.

Our engineering talent allows us to provide direct engineering support to increase the e-readiness of the campuses we connect. Campuses need to distribute the connectivity to their faculty members, researchers and students in order to unleash the latent demand that creates Internet traffic in the KENET network that makes us sustainable.

Today KENET engineers still spend about 40-50% of their time in the member institutions ensuring that our member institution campuses are ready although this is not explicitly our mandate! Our engineers also offer residential and online capacity building workshops to ICT technical staff of member institutions.

Nairobi is one of the most vibrant and competitive places for telecommunication services these days. How does KENET attract new talent into the organisation?

I joined KENET after spending time in universities where I had learnt how to recruit, retain and motivate faculty. I had learnt that the working environment was very important to young faculty members who needed to build their careers.

We had to use similar techniques to retain talent since KENET could not

initially offer the high salaries of the many mobile and Internet services operators. We had to strike a balance and create a healthy working environment.

We therefore created an environment where young graduate engineers were involved in interesting and challenging work and projects that allowed them to grow as engineers very rapidly. People are attracted to be among other people who are doing great things!

Young people love interesting projects. KENET has been fortunate to be on a growth path for the last ten years. Whether it is fibre roll-outs, perSONAR adoption, setting up data centres and community cloud services or building the first African digital certification authority that is accredited in Europe: we have consistently been able to offer our young people interesting projects to get involved in.

But in the last four years, we have also made an in-depth salary analysis and I have gone back to my Board with the results. As a consequence, KENET can strike a healthy balance between competitive salaries in our environment and the opportunities for training, learning and growing.

Where do you see R&E networks developing over the next five years? What do you think the GÉANT community needs to be aware of, what should we do?

Successful NRENs have been able to unite their respective communities. Their members know that the NREN belongs to the community and that it matters to

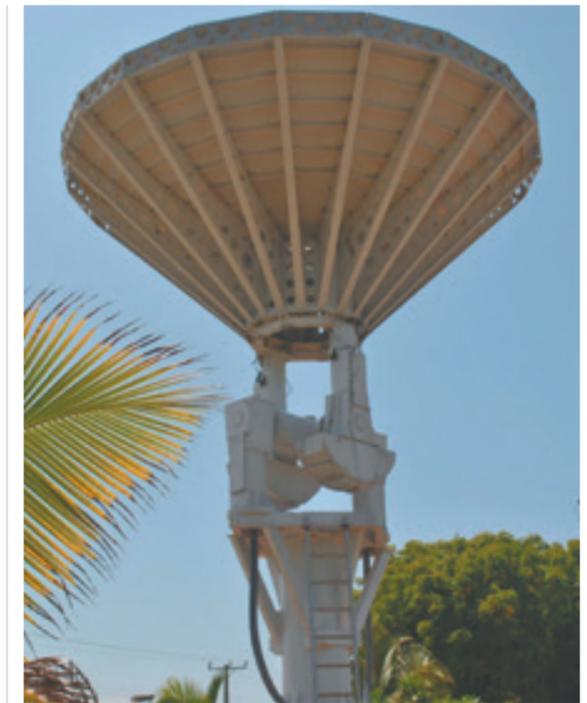
their individual and collective future that the NREN is successful.

But this community based approach is increasingly assaulted. We are assaulted beyond the network, in the cloud.

How do we continue to show the value to our community? We have to help the institutions and universities to execute their mission. We need to keep showing that as an NREN we are critical to our members' future and their growth. And we have to look for new members, we need to become implementation partners outside of the pure R&E environment, supporting our governments and their policy and objectives in ICT, education and innovation. I am wary about the cloud framework agreements that GÉANT has signed. Are they not easily turned into a double-edged sword? KENET is proud to be the community cloud provider, we are building a sustainable community cloud mainly because our institutions are still in the early stages of cloud adoption. This is also important as we ensure that we keep developing our local skills for the cloud.

And it is important that we are at peace with the commercial operators. In KENET we have been successful in managing our business relationships with our commercial leased line or dark fibre providers by demonstrating that it is a win-win business partnership.

When I talk to colleagues in Europe, they tell me they have a skills shortage, for example, in software development. Maybe this is where we can take collaboration between NRENs to a completely new levels. Let us in Africa provide you in Europe with the skills you need and you provide us with the



projects to execute! This way we can recruit and develop high-end ICT talent that could provide technical services to NRENs in the North at competitive costs, similar to the way India has been a software house for the corporate sector in developed countries.

We are really glad that you will deliver a key note at TNC. What do you expect from your attendance at the conference? Will you travel alone or with colleagues? Do you plan to see a bit of Northern Europe before or after the event?

I am excited about going to Norway. The furthest I have been north so far in my life has been Amsterdam in the Netherlands. I am interested in Norway as a country, their success as a nation, their effective education system and the innovative potential. I want to see how the Norwegians live and I would like to visit one of their universities. I am excited to see how the sun never sets, I can hardly imagine that. And then of course, I will be looking for souvenirs. I am travelling with Kennedy Aseda who is on the Global eduoam Governance Committee representing Africa. Kennedy and I have high expectations for our visit to Trondheim, but maybe not of the weather...

And then of course, TNC means meeting friends. The last time I was at TNC was in 2013 in Maastricht, so I really look forward to catching up with my colleagues and friends in the community.