**Telkom Company, Mombasa**

After a one-day travel to Mombasa, we visited Telkom Kenya Mombasa which is the cable learning centre. This is where the fiber optic submarine cables are received from the sea which link Kenya with other countries and continents.

The servers hosted in Telkom serves countries from Mombasa.

The submarine cables which are used in communication in the station include

* • TEAMS Kenya
* • SEACOM
* • EASy
* • LION.

The **fiber optic** cables are used due to their high immunity to **EMI/RFI** damages and **lightening** and also **high data rate.**

It was noted that TEAM Kenya runs from Mombasa to Fujairah while EASy runs from South Africa and connects the ocean countries up to Southern Sudan.

Techniques used in cabling

* • The cables are laid **deep down** the ocean.
* • **Repeaters** are used to amplify the signal to reduce attenuation which results due to the very long distances of cabling. These repeaters are powered using power from the station through copper cables carrying 180kV.
* • **Point-point connection** is used between two suites while **branch connection** is used to link different sites.
* • The cables use **double hammering** to avoid damage of the fiber since it is very delicate.
* • **Thinner cables** are used where the ocean is deep since it’s rare to get damaged by the machines used in the sea while very **thick cables** are used where the sea is shallow since there is likely to be experienced damage as they may come to contact with the ships and other transport machines used in the ocean.

Monitoring is done regularly to avoid failure of communication in case the cables are interfered with. This is achieved through the use of a **system that detects submarines** used to monitor ships closer to the cables hence ensuring effective communication.

In groups of twenty, the trainees visited the server room where they were exposed to the different machines that ensure effective and efficient communication in the station.

The facilitators explained the process by which the cables are received from the ocean to the station, how the signals are amplified, how the cables are terminated and the necessary precautions taken to ensure no interference of the data being transmitted.

Two server rooms were visited i.e. the TEAM Kenya server room and the EASy server room and their difference well explained. The facilitator also took us through the monitoring procedure which is done using computers in the office close to the server rooms.

After the whole exercise we assembled outside the station for further instructions. We then headed to Pirates Beach for refreshment.

**Lesson learnt:**

Fiber optic communication is the fastest communication means and despite of a lot of activities involved to attain the connections, most countries are now after the mode of communication.

* • I learnt the cabling procedure of the fiber optic cables and the necessary precautions undertaken to ensure the process goes through.
* • I learnt the marine cabling techniques used.
* • Telkom Kenya as a parastatal hold larges shares in the station.