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COMMUNITY NETWORK (CN)

Connecting the unconnected



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INTRODUCTION

Most regions, especially the rural areas in Liberia are not connected or cannot afford to be connected to the internet; the reason is, they lack commercial viability. Internet Service Providers will not roll out networks for internet access to areas with less economic value and also low population but high deployment cost.

To make the Internet Society's goal of making internet available for everyone, everywhere a reality, it is important we Build and Sustained Community Network.

Currently half of the world population is unconnected to the internet, mainly in least developed countries in Africa, and Liberia is no exception.



OBJECTIVE

The objective of this presentation is to encourage young community leaders (volunteers) who will willingly collaborate with our chapter to build a CN and achieve the Internet Society's vision of making internet available to everyone, everywhere a reality.

We can bridge the digital divide and serve the underserved by helping to provide affordable and accessible internet using our skills.



LIBERIA DIGITAL REPORT

According to datareportal.com, as of January 2020 the number of internet users in Liberia were 624.6 thousand and internet penetration stood at 12%.

The same source reported that there were 530.0 thousand social media users and that social media penetration stood at 11% at the same time.

However, there are 4.13 million mobile connection in Liberia as of January 2020. The number of mobile connections is equivalent to 83% of the total population . Liberia population is 4.92 million as of the last censurs.

For more information click. <https://datareportal.com/reports/digital-2020-liberia>



WHAT IS COMMUNITY NETWORK?

Community networks (CNs) are networks inspired, built and managed by:

- Citizens (to meet their connectivity needs) - where there is no connectivity at all or for cheaper broadband
- Non-profit organizations – externally initiated to benefit a certain community but involve the community

They provide local access where traditional or commercial networks do not reach or serve particular areas, or where commercial operators do not find it economically efficient to operate in particular areas.

They are “do it yourself” networks built by people for people or initiated by third parties like NGOs.



WHY IS COMMUNITY NETWORK IMPORTANT?

There are several reasons why Community Network is important, here are few:

CN is important because it is about humanity, people, their lives and their communities. Access to affordable internet stimulates economic activities and create opportunities for small business.

CN provide access to information and the sharing of.

CN encourage people to collaborate for the good of their community.



WHAT DO WE HAVE TO DO?

- Communities must be willing to collaborate in putting their resources together to get connected. E.g. financial and other assets like lands and buildings.
- Be granted permission: The Regulations on Community Network is different from regular ISPs, they do not need to go through the same licensing procedure like ISPs because they do not have the resources and are non-profit in nature.
- Therefore Community Network can be classified as network for self provisioning services or network offering services to third parties.
- Get Technical Assistant: A technical assistant will be able give you a full Viability Study.

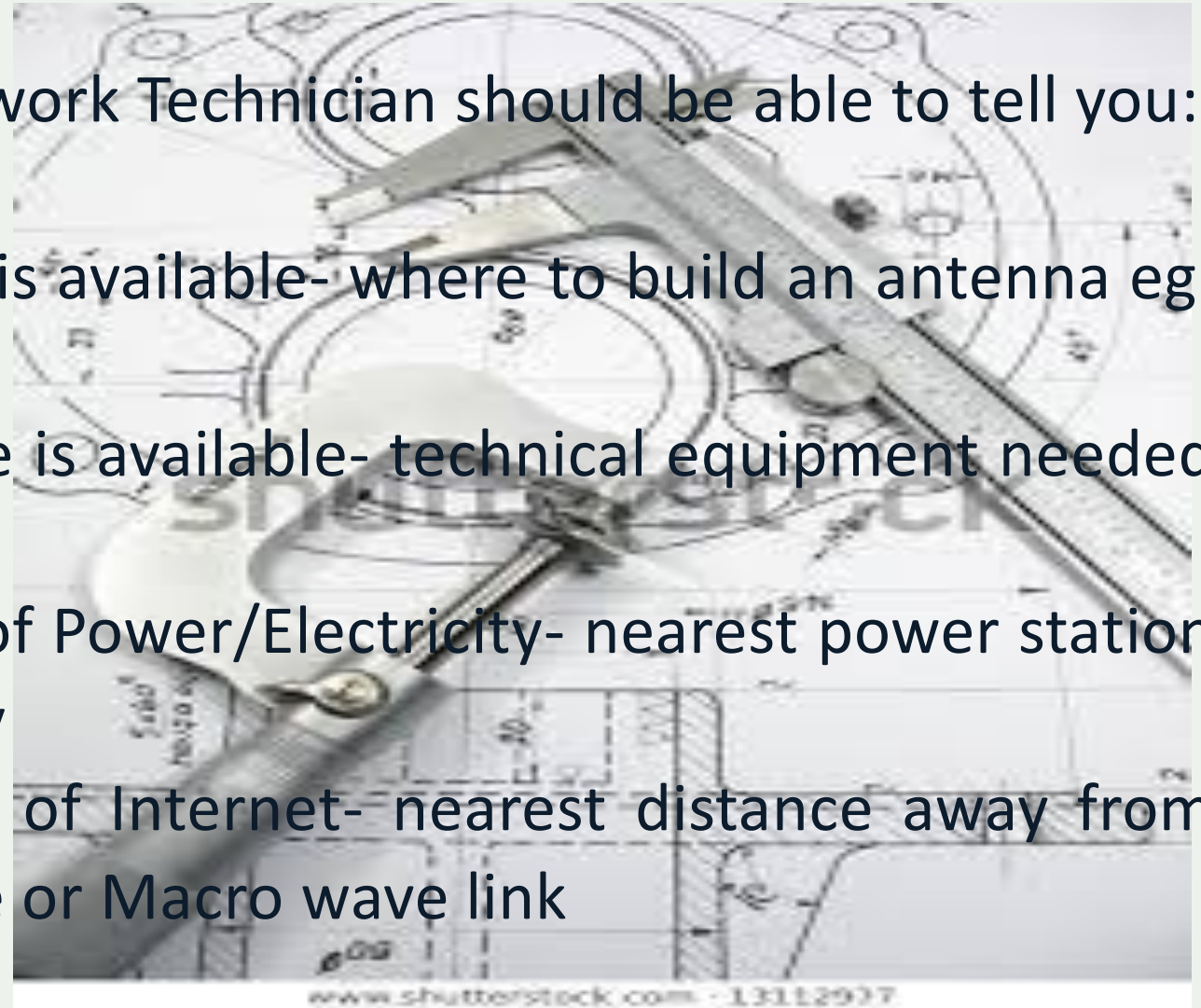
Get Permit From The Requisite Authority



WHAT IS A VIABILITY STUDY

A Viability Study done by a Network Technician should be able to tell you:

- ❖ What Physical infrastructure is available- where to build an antenna eg. Hills or high roof top
- ❖ What Technical infrastructure is available- technical equipment needed for your setup. Eg. cables
- ❖ Where is the closest source of Power/Electricity- nearest power station or you could use solar energy
- ❖ Where is the closest source of Internet- nearest distance away from internet source. Eg use cable or Macro wave link



CHALLENGES

Currently there is no specific regulations in Liberia on Community networks. Though CN critically rely on the availability of spectrum; Ensuring that adequate spectrum is available for community networks is a key policy principle for expanding Internet access.

- Spectrum is viewed as scarce. Instead of focusing on the scarcity of spectrum, we should consider spectrum to be a common resource to be managed efficiently and effectively since it is a public resource.

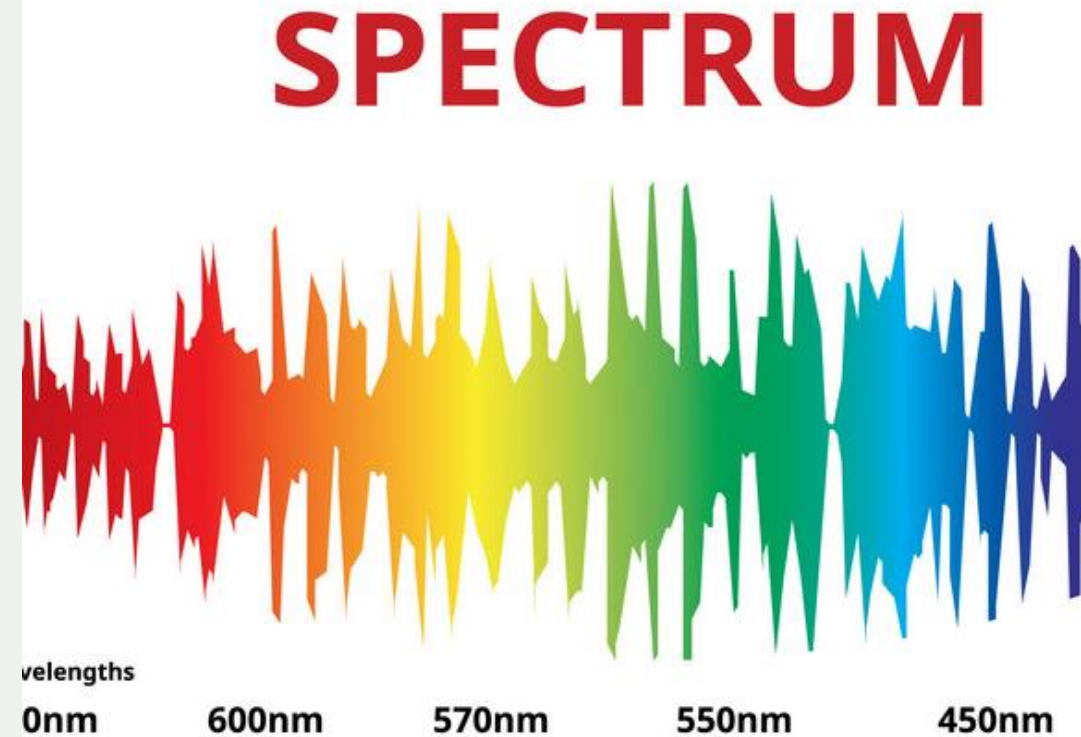
- Traditional regulations: Regulators often favor exclusive and broad licenses, which can result in lack of coverage in some areas and fewer options for multiple and innovative service provision and spectrum usage



CHALLENGES CONT.

Access to spectrum is expensive. Spectrum rights come at high costs. Eg many regulators auction spectrum rights to the highest bidder, and many charge high regulatory fees for spectrum. Often CN do not have financial ability to pay for spectrum rights.

Furthermore, because incumbent service providers have made sizeable investments in obtaining spectrum rights, they often have an expectation of exclusive use of that spectrum that is difficult to combat.



HOW IS COMMUNITY NETWORK SUSTAINED

Community Networks Stakeholders and Sustainability relies on sustained and active participation of all its stakeholders, who contribute resources and generate value for it.

- Stakeholders in a CN includes – volunteers, active participants, end users, public agencies, commercial entities
- Sustainable network need to ensure that all these actors have proper commitments and incentives to contribute to the

network.

- Each actor is driven by different types of motives and aspirations, including economical, socio-cultural, and political.



CN STAKEHOLDERS

- **Volunteers:** In the context of CNs, volunteers are the people who initiate the CN project. They take an active role in the network expansion and help with the technical matters. Organize informational and training events for potential participants. Usually comprise of people that cumulatively possess knowledge and expertise over a wide set of areas e.g technical, legal or finance matters.

- **Active Participants:** Refer to the end users

- **Private Sector Participants:** These entities do over the CN what they do over any other network.

In a CN there are potential customers that may have been unreachable, Provide services where there is demand for them and get compensation.

The incentives for the participation of private sector service providers in the network are almost always economic – interested in profit

COMMUNITY NETWORK SUSTAINIBILITY

- **Public Agencies:** They may want to ensure access rights to public information and services through internet.

They may contribute through funding the initiative, sponsoring network equipment, consuming CN services, facilitating its expansion and growth or by permitting the

- **Funding Sources for CNs:** Member subscriptions and
 - Contributions in kind
 - Donations from supporters
 - Support from public agencies and institutions
 - Funding from private sector through commons-based policies



LET'S BUILD COMMUNITY NETWORK

Reference:

<http://isoc.box.com/s/sswuzst6ulzv3e8jbqmi8dvmuiw9016>

GOOD LUCK!!!!

