Last Mile Connectivity (LMC) training for Asia and the Pacific

Virtual

Oct 6 – 7, 2022

Draft Agenda

Event Website

Background

Equitable information and communications technology (ICT) connectivity around the Asia-Pacific region remains a development bottleneck and particular concern across the region. To connect the offline population excluded from the benefits of the global digital economy and accelerate digitalization trends, policy makers, development partners and investors are reviewing their strategies while considering their fiscal space and determining investment priorities.

Scope and Objectives

The training will attempt to share hands on experience to assist efforts to extend affordable and sustainable connectivity service to under-connected localities. The training will also share knowledge on evidence based identification of the unconnected areas in order to prioritize limited CAPEX for sustainable technical, financial and regulatory solutions to ensure affordability and accessibility to relevant connectivity services.

The event will provide an opportunity to have interactive technical discussion so that participants can learn from real life examples of planning last mile connectivity solutions and thereby upgrade their skills to implement the best practices in their relevant countries.

Target audience

Mid to senior level technical experts involved in public policy and decision makers, regulators, Universal Service Organizations, private sector representatives, development partners, special interest groups, experts, and academics.

Requirements

Participants are expected to have

1. Advanced knowledge on telecom issues and challenges in designing/planning an ICT network infrastructure.
2. Basic understanding or working experience on Geographic Information Systems (GIS) especially for exercise 2
3. Computing device for exercises.
4. Internet access with internet browser. (https://broadbandcalculator.online/#!/)

Training would be conducted in English only.

Language: English

Time in GMT+7	Description
	Day 1: Thursday Oct 6, 2022
1100-1115	**Overview of Last Mile Connectivity tool** **Speaker:** Aamir Riaz Short introduction to the tool and its key features. **Resource**: • Last-Mile Connectivity Internet Solutions Guide • LMC ASP Launch
1120-1330	**TTx -1 LMC tool for infrastructure connectivity (Access, middle and last mile Calculations)** **Speaker:** Mr Vadim Kaptur Using real world data, the session would provide opportunity to demonstrate and work with participants on using the LMC tool for connecting the required infrastructure to the telecommunication network. This would include: 1. *Determining the required bandwidth for a particular facility (settlement, school, hospital, etc.)* 2. *Selection of best available solution for connecting a Community to a Broadband Transport Backbone (Establishing a "**Middle Mile**" Connectivity for Communities, Schools, Hospitals, etc.), including Selecting the Best Topology for a Multi-site Network.* 3. *Choosing the best solution for building broadband access networks in settlements.* **Resources**: see PPTs on event Website
	Day 2: Oct 7, 2022
1300-1530	**TTX exercise 2 – Mapping the unconnected** **Mr Ihar and Mr Oghuzan** **Introduction: 40 mins** • *GIS basics: 5 mins* • *Data formats + QGIS presentation: 30 mins* • *Q&A: 5 mins* **Exercise: 50 mins** • *Importing the datasets: 10 mins* • *Georeferencing an image: 25 mins* • *Static map image, visual output: 10 mins* • *Q&A: 5 mins* **Data analysis: 1 hour** 1. **1.1 Mobile coverage: 0.5 hour** Description: given objects and mobile coverage area images are available, find objects within coverage areas and provide basic statistics for the covered and uncovered objects. **1.2 Line-of-Sight distance calculation to the closest hub: 0.5 hour** Description: given objects and cell tower locations are available, find the nearest cell tower for each object and calculate the distance to it.

	2. *Fiber path algorithm: (Please see video in resources)* Description: given the road network data, objects and nodes locations are available, find routes to connect the objects to the nodes with fiber lines while minimizing total route distance. **Resources**: (event Website) • *GIS basics* • *Data formats + QGIS presentation* • *QGIS version link (you can follow on your computers now or later) + GrassGIS* • *Datasets link (BTW example)* ▪ *Image to be georeferenced (mobile coverage, area), vector (example of road, nodes, and objects) & .csv files (example of cell tower locations)* • *Fiber path Video*
1530-1540	**Closing and next steps towards country blue-prints**

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