



National Institute of Posts, Telecoms and ICT
National Institute of Information Communications
Technology
University of Computer Studies, Yangon

Cambodia NerveNet Field Testing

Chamnan MEAS¹ Sopheap SENG¹

Masugi INOUE² Yasunori OWADA² Kiyoshi HAMAGUCHI²

Myint Myint SEIN³

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I. Introduction

Cambodia NerveNet Field Testing (Operation Management and Content Development to Promote Connectedness of Rural Areas in Cambodia)

The objective of the project is to test NerveNet network and to provide different kinds of information and application to let people in rural areas get connected to the Internet. This pilot project focuses on ICT infrastructure and content sharing for rural areas.

The composite image is divided into three main sections:

- Network Maintenance:** On the left, there is a photograph of a technician working on a server rack. Below it is a network diagram showing connections between various devices: a Yamaha RX1220, a BSI/TG Hub/Fiber, a BSI/TG Server 1, a BSI/TG Server 2, a BSI/TG Server 3, a BSI/TG Server 4, a BSI/TG Server 5, a BSI/TG Server 6, a BSI/TG Server 7, a BSI/TG Server 8, a BSI/TG Server 9, a BSI/TG Server 10, a BSI/TG Server 11, a BSI/TG Server 12, a BSI/TG Server 13, a BSI/TG Server 14, a BSI/TG Server 15, a BSI/TG Server 16, a BSI/TG Server 17, a BSI/TG Server 18, a BSI/TG Server 19, a BSI/TG Server 20, a BSI/TG Server 21, a BSI/TG Server 22, a BSI/TG Server 23, a BSI/TG Server 24, a BSI/TG Server 25, a BSI/TG Server 26, a BSI/TG Server 27, a BSI/TG Server 28, a BSI/TG Server 29, a BSI/TG Server 30, a BSI/TG Server 31, a BSI/TG Server 32, a BSI/TG Server 33, a BSI/TG Server 34, a BSI/TG Server 35, a BSI/TG Server 36, a BSI/TG Server 37, a BSI/TG Server 38, a BSI/TG Server 39, a BSI/TG Server 40, a BSI/TG Server 41, a BSI/TG Server 42, a BSI/TG Server 43, a BSI/TG Server 44, a BSI/TG Server 45, a BSI/TG Server 46, a BSI/TG Server 47, a BSI/TG Server 48, a BSI/TG Server 49, a BSI/TG Server 50. Below the diagram are images of a server rack and a NICT outdoor unit.
- Map:** In the center, a map shows a route from Phnom Penh to Skun. The route is labeled "Optical fiber" and "Radio". A distance of "About 100km" is indicated. A "Telecenter" is shown at the Skun end. A database icon is shown at Phnom Penh. The map is credited to "© OpenStreetMap contributors".
- Application development for solving rural problems:** On the right, there is a graphic with a globe, a laptop, a tablet, and books. Below the graphic are three photographs: a classroom of students, a person working in a field, and a doctor examining a child.

II. Three-Year Plan

1. Action: Maintaining and operating the current NerveNet System ,
2. Action: Development Application of NerveNet Project
3. Action : Mobility and and Administrative

No	Action Planning	2016	2017	2018
1	Maintaining and Operating NerveNet system	Starting		
2	Meeting with Government and NGO for collection data to development content	Starting		End
3	Site survey Rural area collection data to development content	Starting		End
4	Development Content (Agriculture and Education)	Starting		End
5	Content development (Health)		Starting	
6	National workshop with (quality content)		Starting	
7	Modify development content		Starting	
8	International workshop (quality content)		Starting	
9	Accessibility content NerveNet		Starting	
10	Design content for Myanmar			Starting
	Planning Proposal ASEAN IVO			Starting
11	Summiting proposal for update content and design content for ASEAN member			Starting

Actions	Total	1 st Year	2 nd Year	3 rd Year
Maintaining and Operating of Project		\$9,090	\$12,660	\$11,700
Development End Content		\$11,500	\$10,200	\$9,150
Mobility and Admin		\$9,410	\$7,140	\$9,150
Total	\$90,000	\$30,000	\$30,000	\$30,000

III. Application Development

We are also thinking that the possible and useful application for e-learning, e-agriculture and e-health. Using the data sharing function and the portable for the benefit of people living at in rural areas, the contents online distribution, voice call and messaging within an area and to the Internet, and a variety of sensing applications for education, agriculture, healthcare, etc. between the telecenter and Skun and/or Phnom Penh or many where content sharing for rural areas .

In the project, we will survey real needs in rural areas, and panther cooperation discuss possible applications, need to develop for rural :

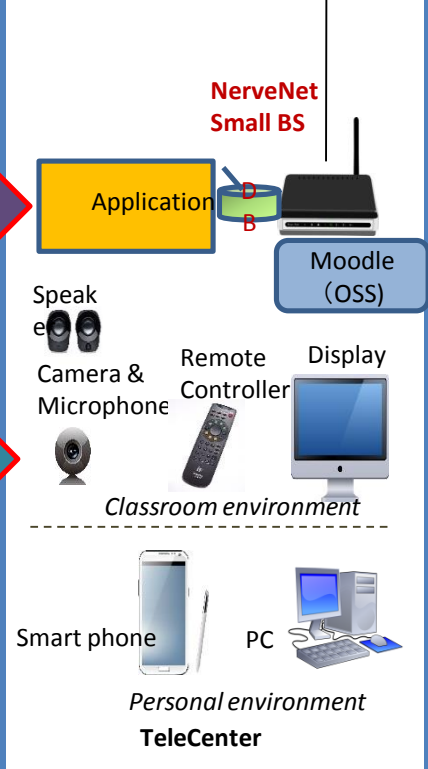
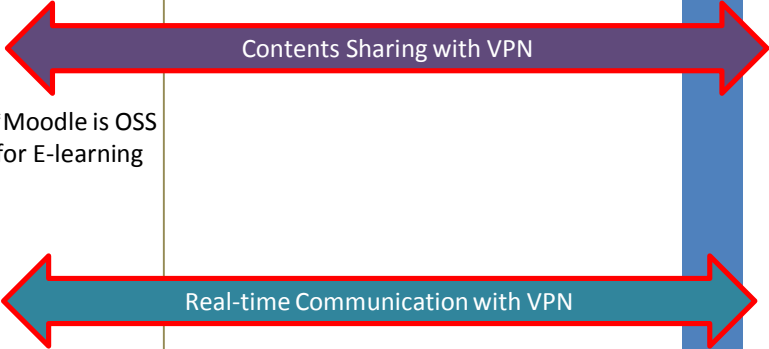
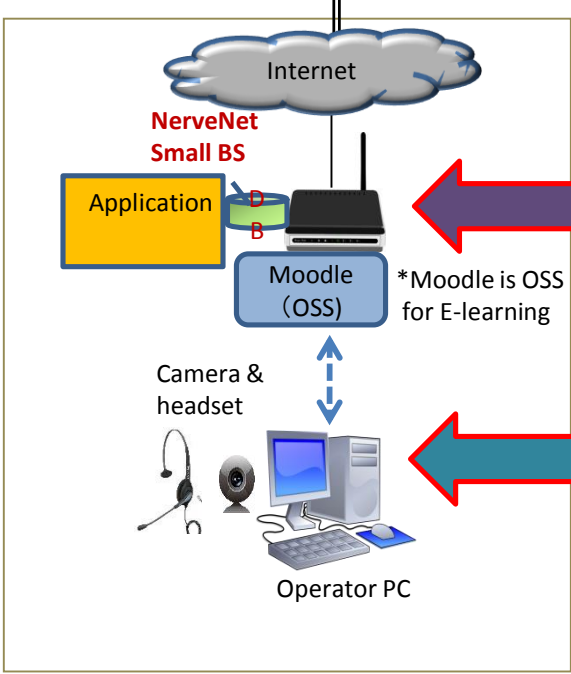
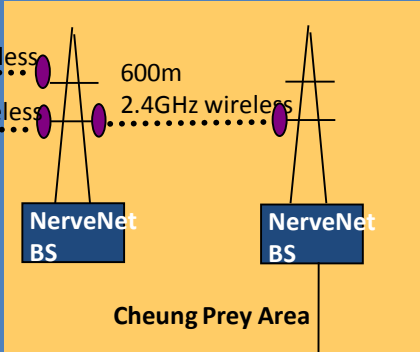
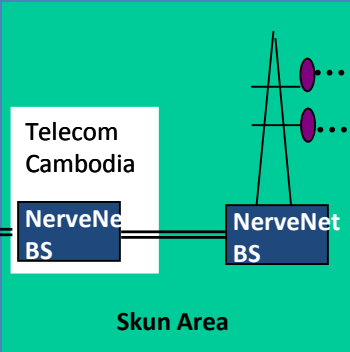
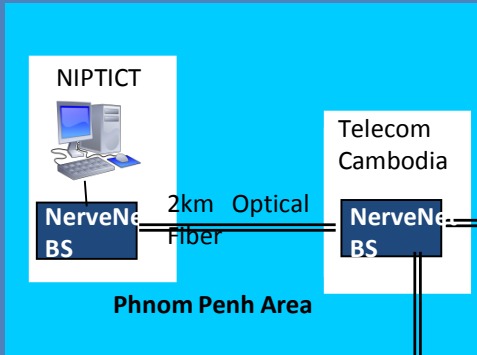
1. Importance Application for rural areas and they used very day Education (e-learning content) and Agriculture (e-agriculture), after then we will develop application for health (e-health).

2. How we can develop application with NerveNet

- Building Team Working
- Equipment
- Budget

3. Application design by NIPTICT, NICT and UCSY will conduct the site survey to understanding the need of people in rural areas. An annual workshop will be hosted by NIPTICT to share the potential contents and application among ASEAN institutes.

III. Application Development



IV. Meeting and Site Survey

Our have meeting discussion with Ministry of Agriculture and Khmer Academy share content for rural areas

- How to design content of NeveNet for Rural Areas
- Set up team for cooperation
- Sharing data for NerveNet



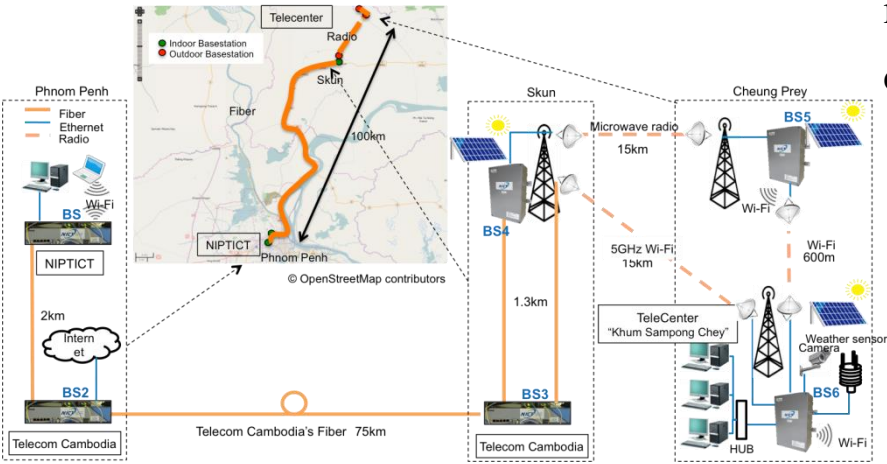
1. After discussion with Ministry of Agriculture and Khmer Academy and other cooperation , we are consider to design 1. Data sharing content and 2. conference content

- Analyzing data
- design catalo of NerveNet of Content
- Have technical discussion for partner cooperation

V. Maintenance and Operation

Cambodian NerveNet 2016

Nervernet system management and operated like : Remote monitoring and improvement of the condition of the fiber cable connection point between PP to Tele-center



Maintenance of NerveNet hardware : to clean up of PV panels, check status of every equipment, replacement of equipment when necessary



VI. Summary and Future Plan

- NIPTICT have cooperation NICT and UCSY for development of contents NerveNet , management and operation of NerveNet system in Cambodia as well as the contents that will be useful in Cambodia ,Myanmar and sharing content to ASEAN rural areas.

- NIPTICT need supporting more from NICT and UCSY are members of NerveNet project to development NerveNet application content , our future plan activities of NerveNet project in Cambodia :

1. Development Content for (Agriculture and Education)
2. A site survey of rural areas and collection of data to develop contents
3. A meeting with the government and NGO for collection of data to develop contents
4. Maintaining and Operating NerveNet system
5. Consultation Workshop for NerVeNet application