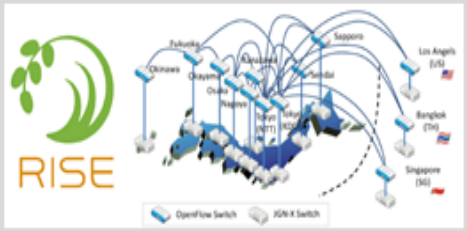
SDN/NFV Infrastructure for Disaster Mitigation and Smart Cities

M2M / IoT Testbed

SDN/ NFV Testbeds

PRAGMA-ENT



VNU-HUST-PTIT

CENTRA

NARLabs
National Applied Research Laboratories
National Center for High-performance Computing

Big Dat Analytics Platforms

MQTT Broker
(v3.1 / v3.1.1)

NARLabs
National Applied Research Laboratories
National Center for High-performance Computing

CECEA

CENTRA

Applications on Android

Applications

MAPÚA INSTITUTE OF TECHNOLOGY

VNU

IoT/M2M Gateway
(AirBox, WiSUN)

IoT/M2M Devices

Early Warning Sensors / Smart Enviroment

Objectives:

To build a ASEAN SDN/NFV testbed (Philipine, Vietnam,. Myanmar, Taiwan, Japan)

Problems to be Solved:

- Reliable / Resilient Network,
- IoT enabled Transport System (Environmental Sensors and Gateways / MQTT Broker)
- Case Study 1: Early Warning Systems (e.g. Flood/Typhoon/Earthquake Monitoring)
- Case Study 2: Smart Cities (e.g. Smart Environment)

Team Members:

- Vietnam (VNU, PTIT, HUST),
- Philippines (Mapua),
- Myanmar (UCSY)
- Japan (NICT),
- Taiwan NARLabs (CECEA, NCHC),
- PRAGMA-CENTRA

Work Items:

- Establish a local SDN/NFV testbeds
- Establish the international connections between the testbed and with the NICT JOSE, RISE and PRAGMA-CENTRA, CECEA
- Set-up trials/tests of proposed solutions(resilient/IoT)

Schedule/Deliverables:

Works	Year 1		Year 2		Year 3	
Establish a local SDN/NFV testbed						
Establish the international connections between the testbed and with the NICT JOSE, RISE and PRAGMA-CENTRA, CECEA						
Set-up trials/tests of proposed solutions(resilient/IoT)						

Initial Activity:

- September – November 2016:

1) Detail specification of an ASEAN SDN/NFV Lab (3 local testbeds)
2) Detail specification of setting up a connection between the lab and SDN/IoT testbeds in Japan and Taiwan
3) Setup local testbeds (Optional)