

# Interoperability Working Group

## Members

**Chair:** Naoaki YAMANAKA (KEIO University)

**Vice chairs:** Satoru OKAMOTO (KEIO University), Masatoshi SUZUKI (KDDI Labs)

**Members:** KEIO University, NTT, KDDI Labs, Anritsu, Fujitsu, HITACHI, Mitsubishi Electric, NEC, NICT

## Projects

**PJ31: Ethernet over OTN technology**

- 400Gigabit Ethernet -LANPHY transmission technology etc...

**PJ32: Multi-Technology Transport Network control technology**

- Multi Layer/ Multi Domain network control technology

- SDTN (Software Defined Transport Network) etc...

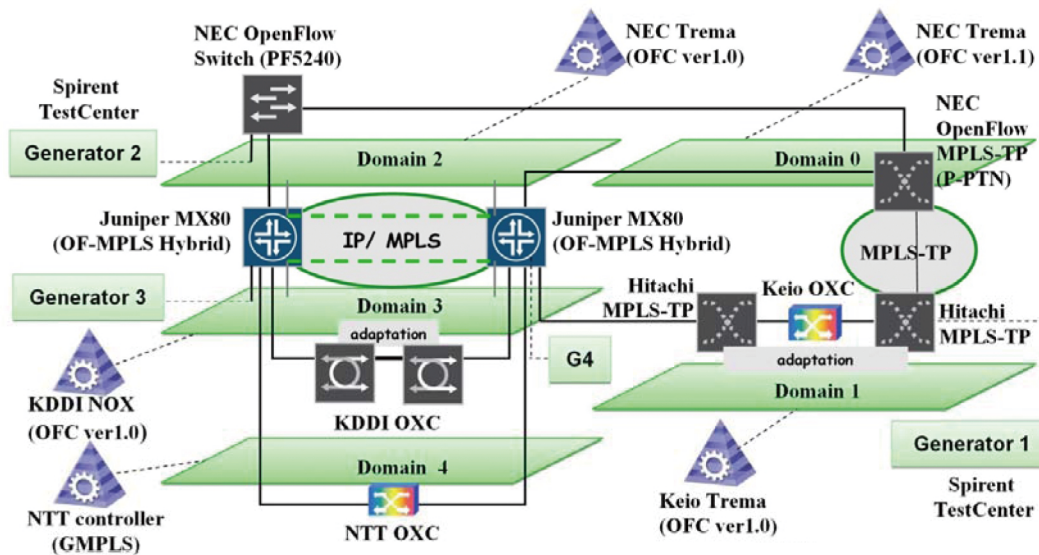


## Testing/ Demonstration

### World's First Success in SDTN (Software Defined Transport Network) interoperability demonstration at iPOP2012 (PJ32)

Interoperability of SDTN over Multiple Transport Networks

- Multiple Transport Technologies (MPLS, MPLS-TP, Optical)
- Multiple Control Technologies (OpenFlow v1.0, OpenFlow v1.1, GMPLS)
- 7 participants (Carrier, System vendor, Test equipment vendor, University)



iPOP2012 Showcase Network

### World's First Successful Demonstration of Multi-Vendor Equipment Interoperability in Transmitting 100 Gigabit Ethernet Signals over OTN (PJ31)

OTN network interoperability field trial including 90 km optical fiber transmission had been demonstrated and completed with multi-vendors for OTU4 interface carrying 100 Gigabit Ethernet signal. (Dec. 2011)

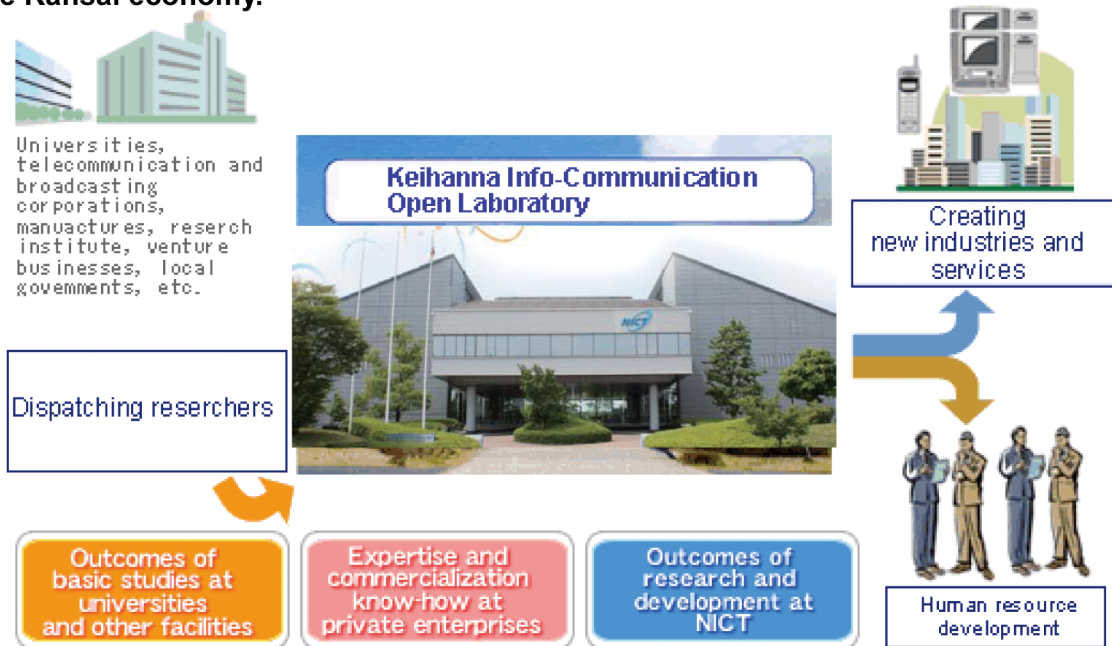
## Standardization

- Contributed to the documentation of **G.Sup43** "Transport of IEEE 10G Base-R in Optical Transport Networks (OTN)" in Oct. 2006, and updated in Dec. 2008
- One of the over clock mapping of 10G Base-R into ODU2e described in G.Sup43 was promoted to the client signal of OTU4 as a document of **Revised G.709** in December 2009.
- **RFC 6205** "Generalized Labels for Lambda-Switch-Capable (LSC) Label Switching Routers" in March 2011

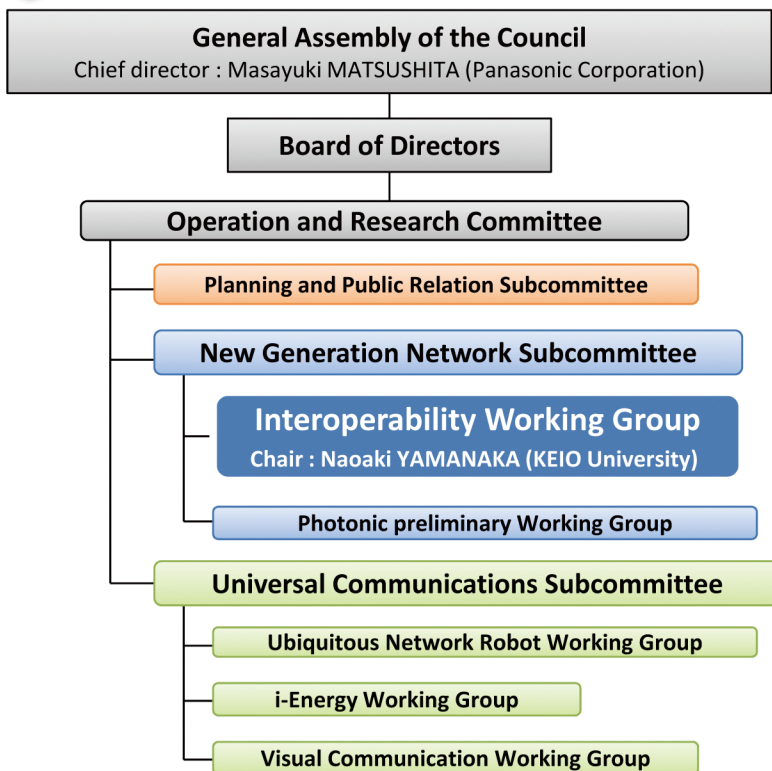
# The Research Promotion Council of Kei-han-na Info-Communication Open Laboratory Overview

## Objective

Established to promote effective use of the Kei-han-na Open Info-Communication Laboratory by encouraging research and development in the related research field of the laboratory through collaboration between industry, academia and government, and to develop new technologies, human resources and new industries, thereby fulfilling the Kansai region's role in developing the world's leading ICT economy and revitalizing the Kansai economy.

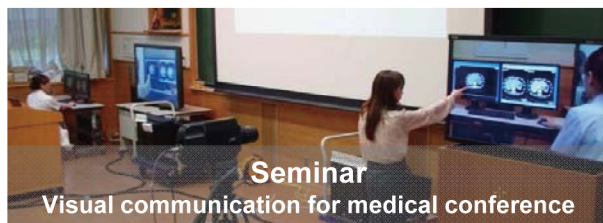
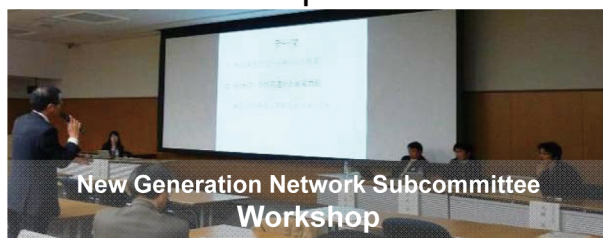


## Organization



## Activities

### •Seminar/ Workshop



### •Symposium

