

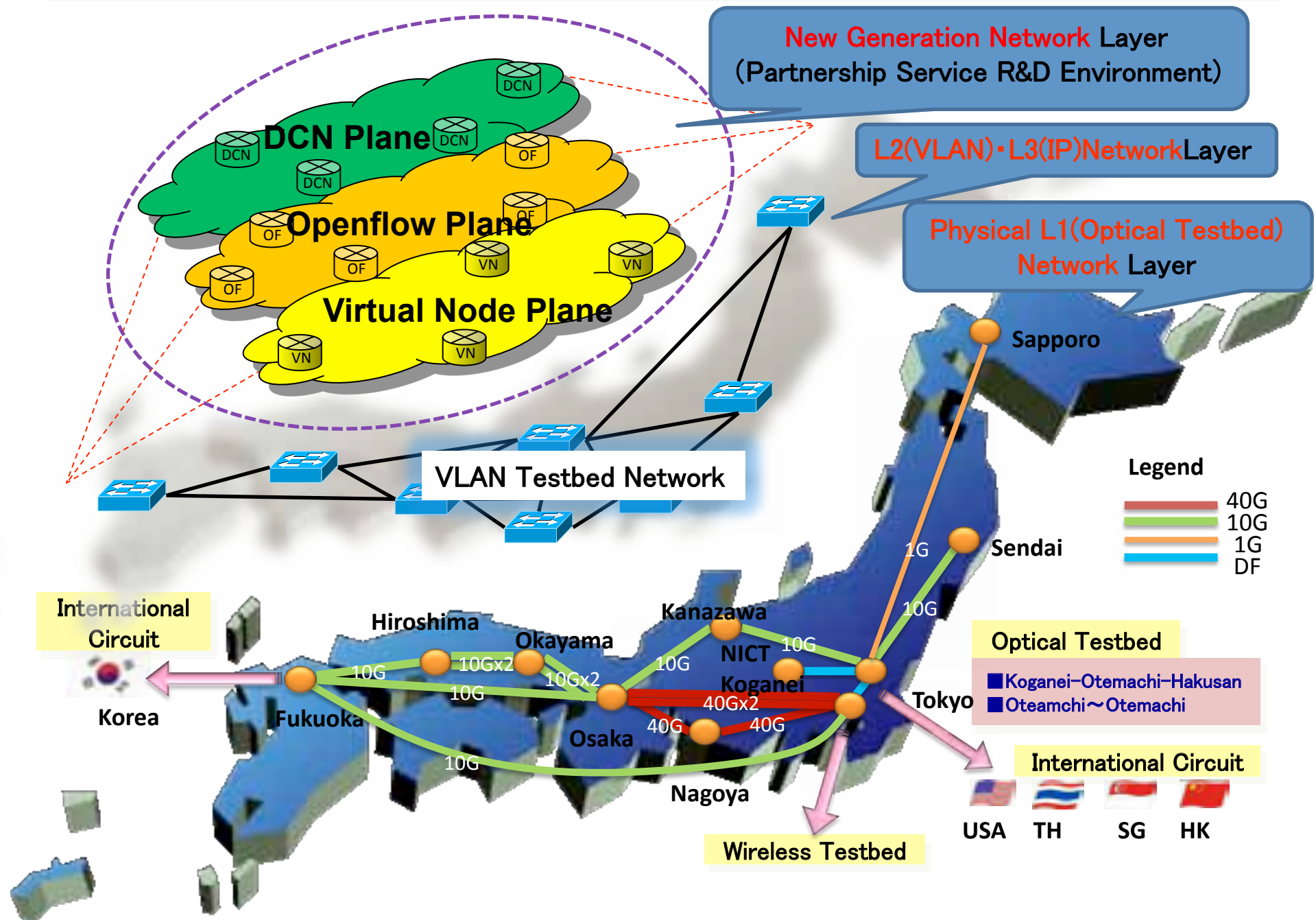
JGN-X: ICT Global Testbed

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National Institute of Information and
Communications Technology (NICT)



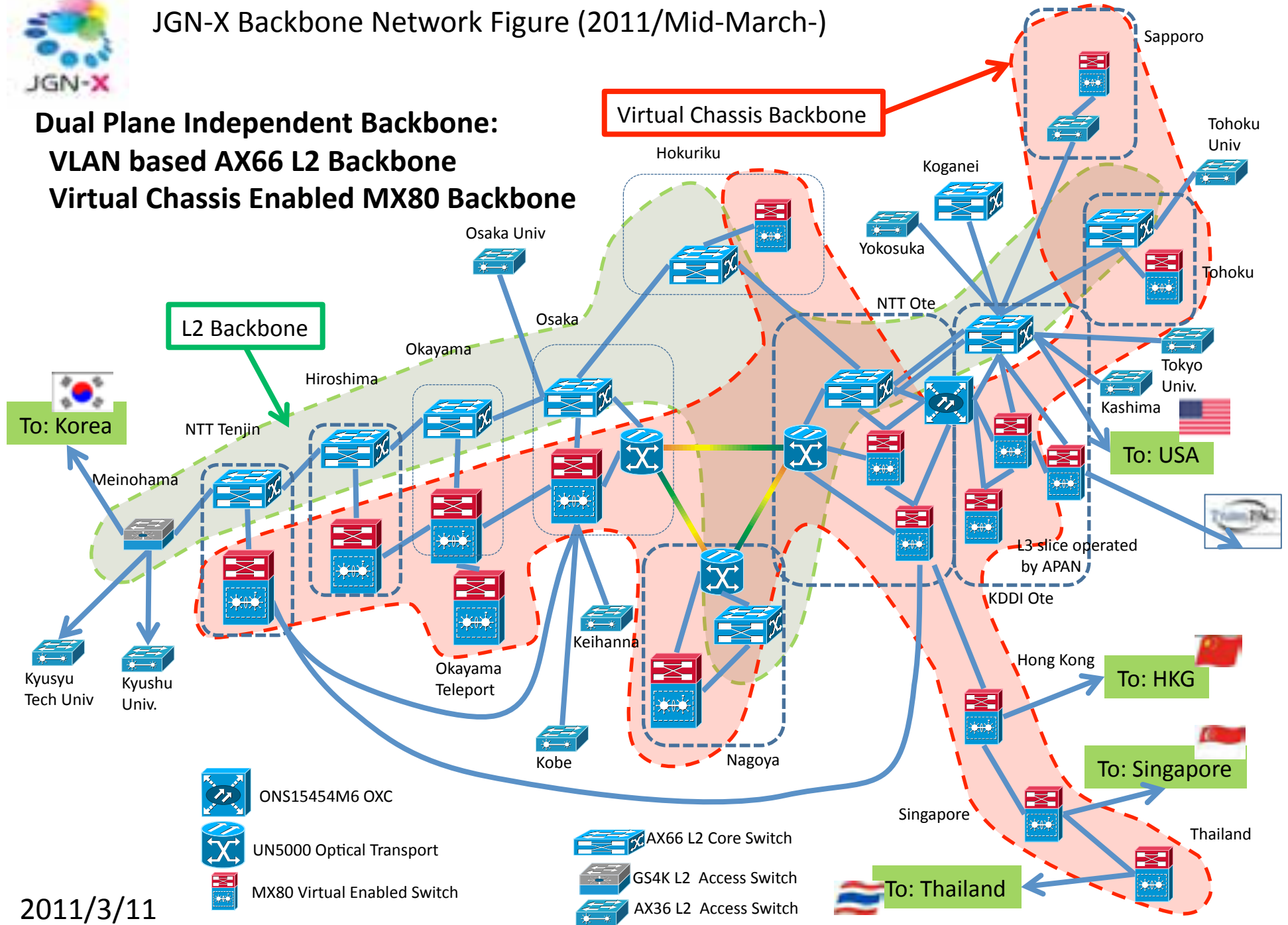
JGN-X Network Overview





JGN-X Backbone Network Figure (2011/Mid-March-)

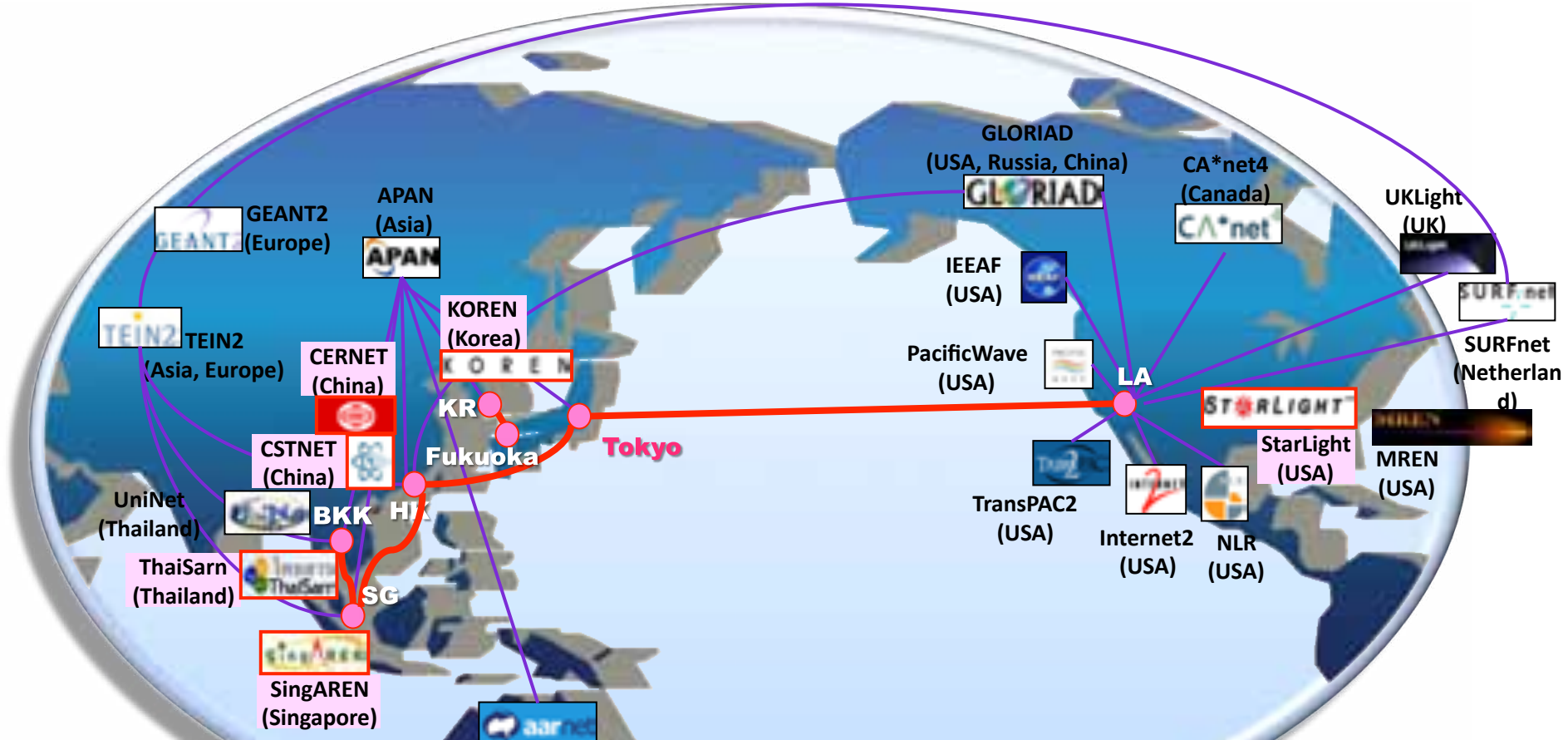
Dual Plane Independent Backbone:
VLAN based AX66 L2 Backbone
Virtual Chassis Enabled MX80 Backbone



2011/3/11

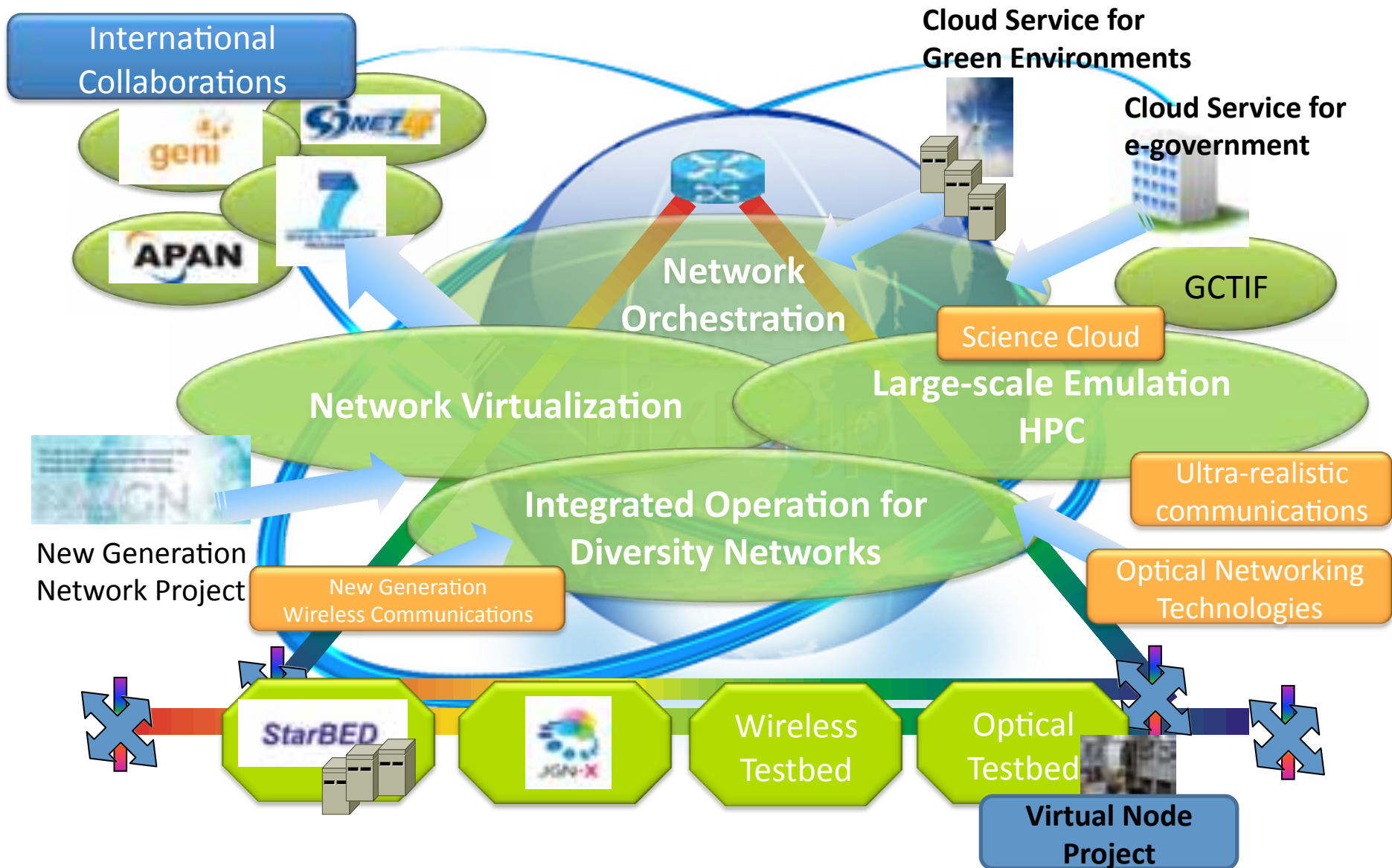


JGN-X International Circuits



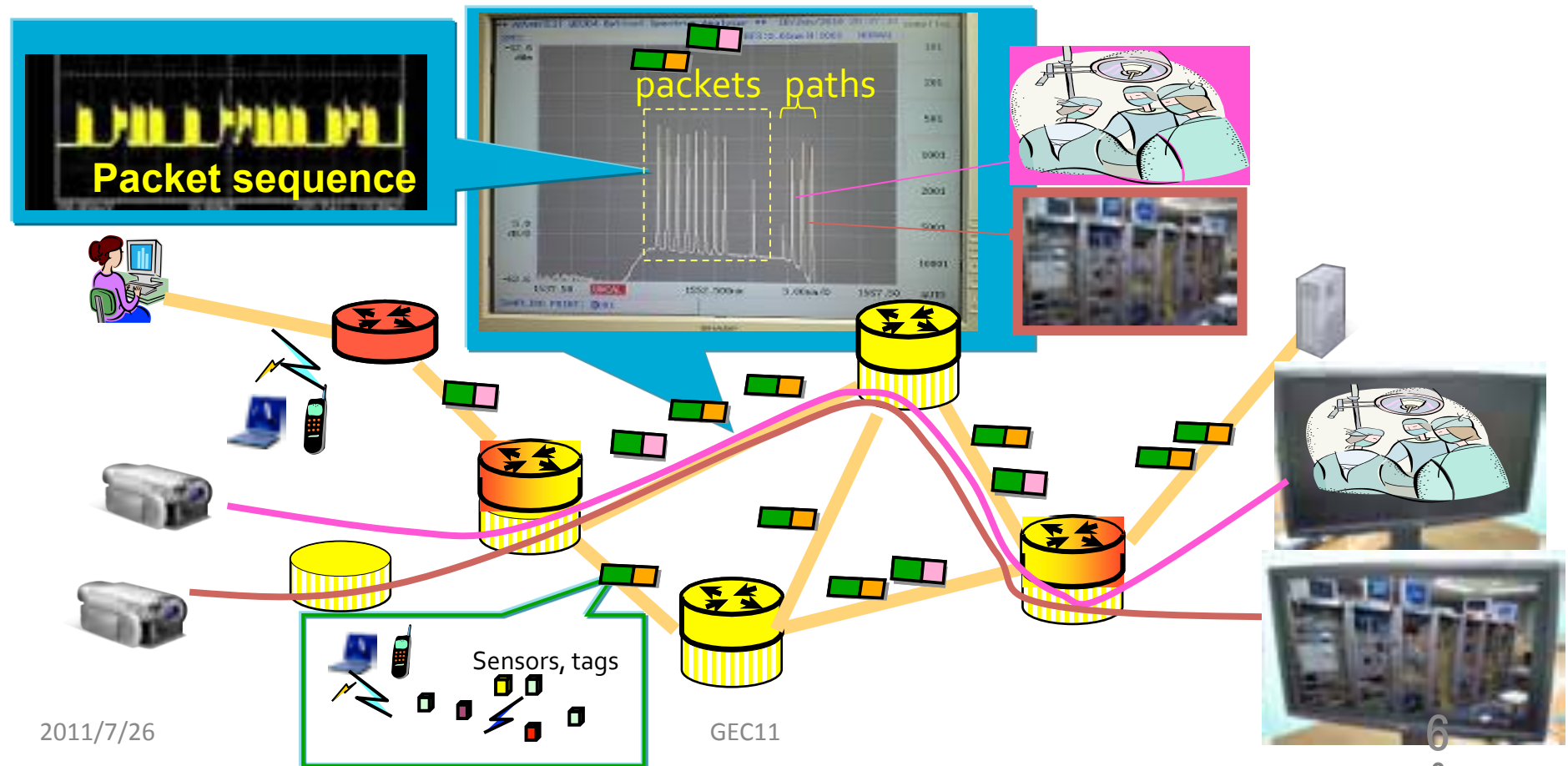
- US-JP line** : Tokyo-Los Angeles, 10Gbps
- KR-JP line (APII)** : Fukuoka-Busan, 10Gbps
- HK-JP line** : Tokyo-Hong Kong, 10Gbps
- HK-SG line** : Hong Kong – Singapore 2.4Gbps
- SG-TH line** : Singapore –Thailand 622Mbps

Research projects in JGN-X

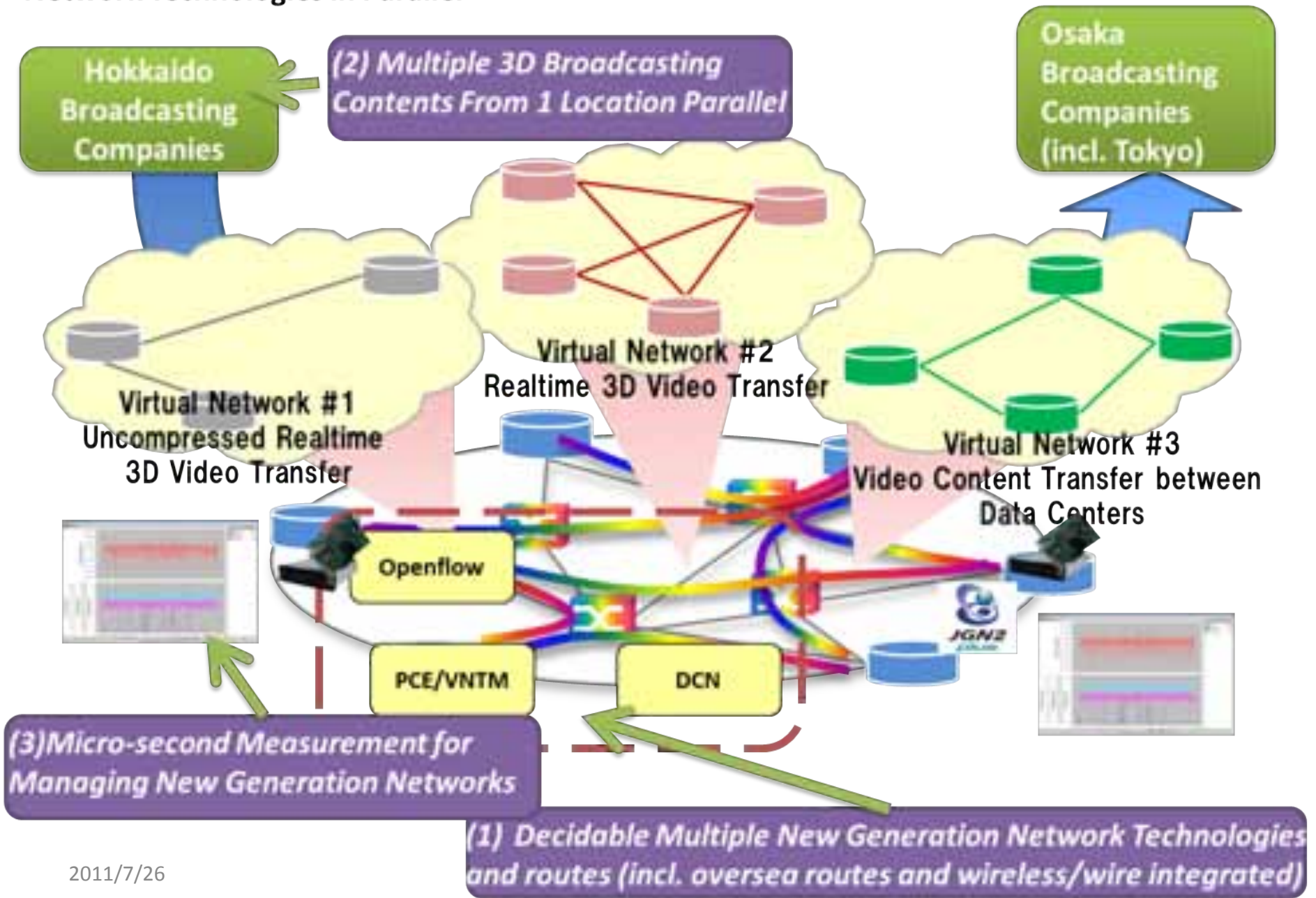


Optical Packet & Circuit Integrated Networking

- User view: A “**high-speed, inexpensive**” service and “**low delay, low data-loss**” service on a **single** optical network
- Network provider view: Large **switch capacity**, **energy** saving, and flexible & efficient **resource use** under a **simple** control

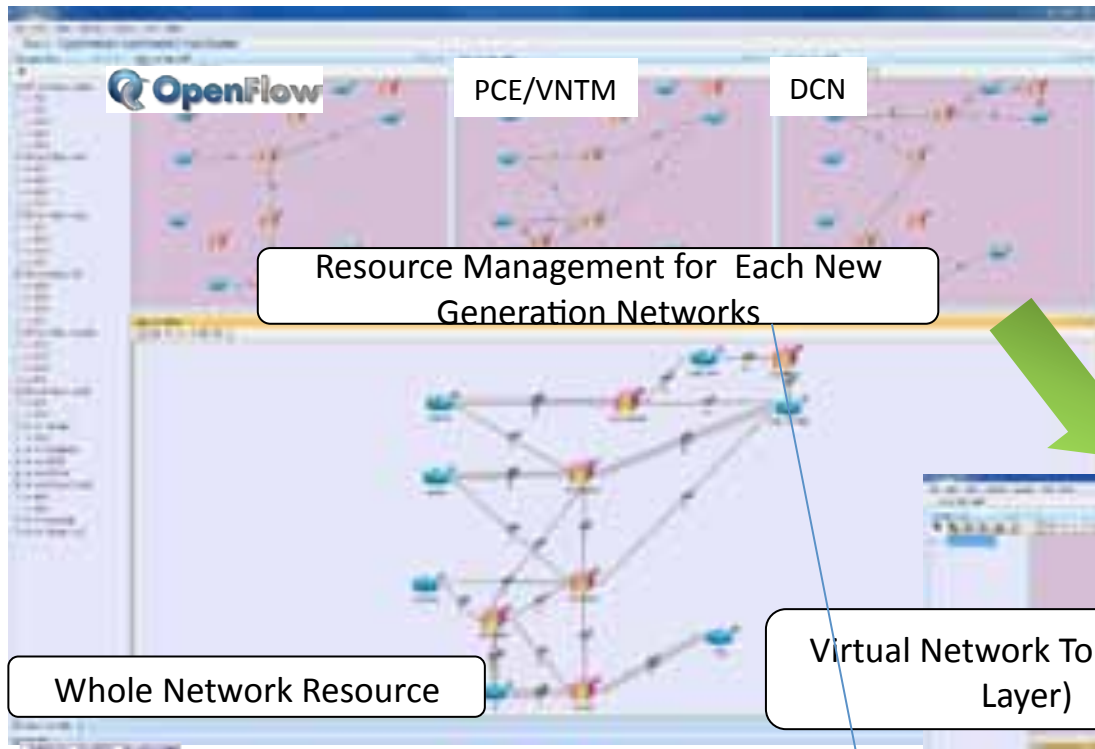


Control and Management of Video Broadcasting Using Multiple New Generation Network Technologies in Parallel

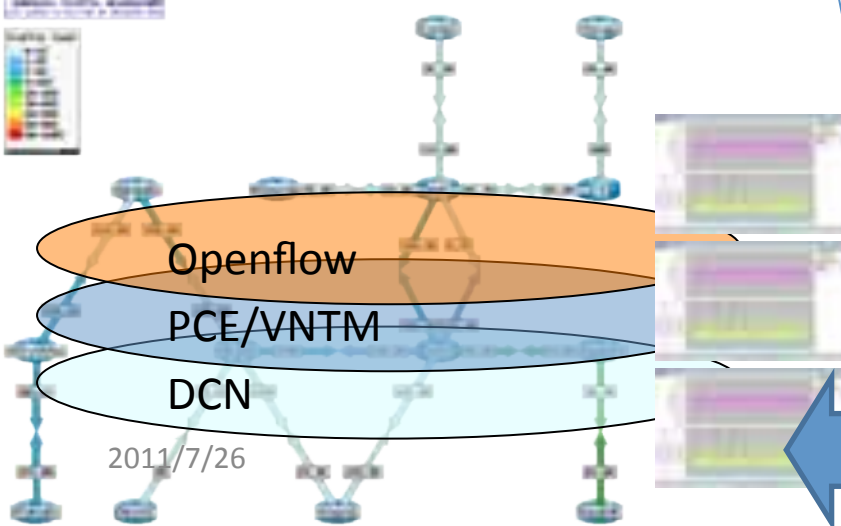
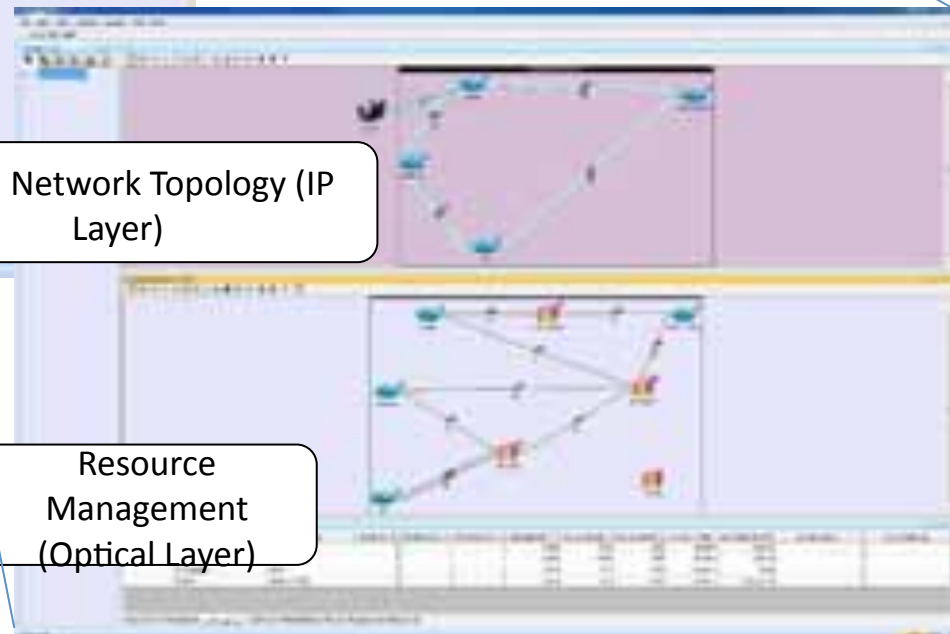


Measuring/Managing Multiple New Generation Networks on Single Management GUI

GUI for Managing Whole Network



GUI for Individual New Generation Network



1st Interface to Measure micro-second measurement data and the ability to share it among users

Summary

- JGN-X is a network testbed for FI/NWGN R&D operated by NICT.
- JGN-X accommodates three NWGN planes (Vnode/OpenFlow/DCN).
- We encourage challenging experiments.

Thank you!!