Appendix 1: Reference (Details of individual technologies)

1. Technology for a common control framework

2. Technologies for integrated control of multiple layers and domains
3. Technologies for developing virtualization-compatible SDN nodes

a) Automatic Tunnel Protocol-Setting Processing

- Virtualized NW
- Physical NW

Tunnels (Eq.: VXLAN)

Resource Pool

- Tunnel Protocol Setting
- OpenFlow Controller
- Switch Controller

High Speed Software Packet Processing

Automatic Tunnel-Setting Processing

SDN Software Switch "Lagopus"

b) Packet-Aware Opt. Path Processing (ODUflex Support)

- Optical Core NW
- Virtualized NW

Resource Pool

- Optical core NW
- Optical core node

Effective Network Resource Utilization by Multi-Layer Adaptation

Switch Controller

ODU Switch

Automatic Setting by OpenFlow Protocol Extension

DC: Data center, NW: network