A Unauthorized Access Prevention Subsystem. Unauthorized access prevention subsystem is a device that is placed at off-campus connection point of KIT. This subsystem should have function to defense unauthorized accesses from outside, to prevent the unauthorized traffic from the campus, and to detect the vulnerable hosts in the campus.

① Firewall

(a) It should have two or more ports (each of which operates as 10 Gbase-SR／LR／LRM) based on the IEEE 802.3 ae.

(b) It should have function to control more than 7 millions of concurrent sessions.

(c) It should have function of VPN tunneling.

(d) It should have function of virtual domain.

② Firewall Cloud

(a) We seek opinions and information widely about software products of firewall running on virtual-machines.

(b) It should have function of VPN tunneling.

③ Intrusion Prevention System

(a) It should have two or more ports (each of which operates as 10 Gbase-SR／LR／LRM) based on the IEEE 802.3 ae.

(b) It should have function to interpret worms, viruses, malware and P2P protocols and to block the communications automatically.

B Intercampus Network Subsystem. Intercampus network subsystem provides a high-speed network infrastructure that interconnects Tobata campus, Iizuka campus and Wakamatsu campus to facilitate high-speed communications among them.

① Intercampus Switch A

(a) It should have more than one ports (each of which operates as 10 Gbase-ZR) based on the IEEE 802.3 ae.

(b) It should have 24 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(c) It should have a login function using SSH protocol.

(d) We seek opinions and information widely about devices with network virtualization capabilities.

② Intercampus Switch B

(a) It should have more than one port (each of which operates as 10 Gbase-ER) based on the IEEE 802.3 ae.

(b) It should have 24 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(c) It should have a login function using SSH protocol.

(d) We seek opinions and information widely about devices with network virtualization capabilities.

C Campus Network Subsystem. Campus network subsystem provides a high-speed network in-campus infrastructure that interconnects existing information systems including all faculties, administration sections, and research and educational facilities in KIT.

① Core Switch A

(a) It should have 24 or more ports (each of which operates as 10 Gbase-SR／LRM／LR based on SFP＋ and also as a 1000 Base-SX based on SFP) based on the IEEE 802.3 ae and IEEE 802.3 z.

(b) It should have 24 or more ports (each of which operates as 10 GBase-T and also as a 1000 Base-T) based on the IEEE 802.3 an and IEEE 802.3 ab.

(c) It should have a routing function by OSPFv 2, OSPFv 3 RIPv 2 and PIM-SM protocol.

(d) It should have a login function using SSH protocol.

(e) We seek opinions and information widely about devices with network virtualization capabilities.

② Core Switch B

(a) It should have 24 or more ports (each of which operates as 10 Gbase-SR／LRM／LR based on SFP＋ and also as a 1000 Base-SX based on SFP) based on the IEEE 802.3 ae and IEEE 802.3 z.

(b) It should have a loop guard function.

(c) It should have a login function using SSH protocol.

(d) We seek opinions and information widely about devices with network virtualization capabilities.

③ Node Switch

(a) It should have more than one port (each of which operates as 10 Gbase-SR／LRM／LR based on SFP＋) based on the IEEE 802.3ae.

(b) It should have four or more ports (each of which operates as 1000 Base-SX based on SFP) based on the IEEE 802.3 z.

(c) It should have 24 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(d) It should have a loop guard function.

(e) It should have a login function using SSH protocol.

(f) We seek opinions and information widely about devices with network virtualization capabilities.

④ Floor Switch A

(a) It have more than one ports (each of which operates as 10 Gbase-SR／LR／LRM based on SFP＋) based on the IEEE 802.3 ae.

(b) It have 48 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(c) It should have a loop guard function.

(d) It should have a login function using SSH protocol.

(e) We seek opinions and information widely about devices with network virtualization capabilities.

⑤ Floor Switch B

(a) It should have more than one ports (each of which operates 1000 Base-SX based on SFP) based on the IEEE 802.3 z.

(b) It have 24 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(c) It should have a loop guard function.

(d) It should have a login function using SSH protocol.

(e) We seek opinions and information widely about devices with network virtualization capabilities.

⑥ Floor Switch C

(a) It should have more than one ports (each of which operates 1000 Base-SX based on SFP) based on the IEEE 802.3 z.

(b) It have 48 or more ports (each of which operates as 1000 Base-T) based on the IEEE 802.3 ab.

(c) It should have a logo guard function.

(d) It should have a login function using SSH protocol.

(e) We seek opinions and information widely about devices with network virtualization capabilities.

D Wireless Network Subsystem. Wireless LAN subsystem provides Internet access services through information outlet based on wireless LAN in KIT. It provides a high-speed network infrastructure that interconnects existing systems.

① Wireless LAN Controller

(a) It should have function to manage more than 200 base stations on a single controller.