## **TELECOMMUNICATIONS**

## Mission

The Information Technology Telecommunications department provides a reliable, high-quality infrastructure for its clientele with advanced technology and services.

### Vision

The Information Technology Telecommunications department will:

- Be a model for the construction of a fault-tolerant, self-healing network infrastructure capable of 99.99% availability;
- Be a nationally-recognized training center for telecommunications professionals who demand excellence;
- Provide a research center that tests and steers the development of cutting-edge communications technologies; and
- Be recognized for excellence in client satisfaction and service.

## **Core Values**

**Excellence** – We seek excellence in all our endeavors, and we are committed to continuous improvement.

**Integrity** – We are committed to the principles of truth and honesty, and we will be equitable, ethical, and professional.

**Service** – We believe that serving others is a noble and worthy endeavor.

**Intellectual Freedom** – We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge.

**Diversity** – We respect others and value diversity of opinion, freedom of expression, and other ethnic and cultural backgrounds.

**Stewardship of Resources** – We are dedicated to the efficient and effective use of resources. We accept the responsibility of the public's trust and are accountable for our actions.

# **Goals, Critical Success Factors, Objectives, and Strategies**

Goal One. Supply a reliable, contemporary, and effective telecommunications infrastructure that provides ubiquitous access for the students, staff, and faculty of the OSU system.

### **Critical Success Factors:**

- Create a unified telephone system across all campuses
- Create a secure wireless network to serve 100% of each campus
- Create a tiered security scheme for the wired network
- Increase backbone capacity by 10-fold
- Increase system network availability to 99.99%

#### Objectives:

**Objective 1.1:** Operate a state-of-the-art telecommunications network.

Strategies:

- Secure adequate funding sources.
- Develop structured training programs for staff.
- Establish voice-over-internet-provider connectivity between each branch campus
- Obtain personnel with vast routing expertise.
- Develop dedicated research and development resources.
- Utilize professional services where necessary to expedite development and offload internal resources.

**Objective 1.2:** Deliver basic services reliably and effectively.

Strategies:

- Create a true Network Operations Center.
- Automate standard move, add, and change procedures to eliminate error.
- Institute rigid change control processes.
- Dedicate resources to documentation and recordkeeping.
- Automate any repetitive and resource intensive processes.

**Objective 1.3:** Deliver a secure telecommunications environment.

- Develop a network authentication system.
- Begin operating true firewall services at the border.
- Automate discovery and/or restriction of rogue devices/systems.

- Establish site-to-site virtual private networking connectivity between remote locations.
- Select, purchase, and implement an intrusion detection with prevention system.
- Begin requiring registration of servers.
- Begin implementing results of security report.

# Goal Two. Support OSU's increasing activities in excellence in teaching, research, and public service to raise the quality of life.

### **Critical Success Factors**

- Create a comprehensive research and development facility within the next 2 years.
- Create partnerships with academic programs to increase the quality of telecommunications-related education at Oklahoma State University.
- Increase participation in the research network by 100%.
- Create partnerships with key industry leaders to participate in the development of telecommunications technologies.
- Create partnerships with key communications providers to expand OSU's reach to the Oklahoma community at large.

## **Objectives:**

**Objective 2.1:** Support high performance computing.

Strategies:

- Develop a high-speed research network.
- Work with Vice President for Research to prepare for upcoming needs.

**Objective 2.2:** Be a factor in economic development and community service.

Strategies:

- Participate in industry committee and associations.
- Facilitate knowledge transfer with colleagues and external contacts.
- Present technologies at appropriate conferences and workshops.
- Participate in grant writing and development of new technologies.

**Objective 2.3:** Provide effective and innovative support for researchers and instructors.

Strategies:

- Develop a high-speed research network.
- Work with Vice President for Research to prepare for upcoming needs.
- Develop dedicate research and development resources.

**Objective 2.4:** Support technology access for rural and underserved areas.

Strategies:

• Partner with vendors and providers to extend the reach of the OSU network.

• Provide support to OSU-affiliated locations with no dedicated networking staff.

# Goal Three. Work effectively with others inside and outside OSU to foster collaborations, find synergies, and improve services.

### **Critical Success Factors:**

- Increase references to OSU telecommunications in major telecommunications venues by at least 10-fold within the next 5 years
- Partner with other leading communications providers to develop of telecommunications technologies
- Provide best practices documentation for key technologies in use at OSU
- Receive at least 1 major recognition for excellent customer service

### **Objectives:**

**Objective 3.1:** Deliver quality service.

Strategies:

- Develop an effective Customer Service department.
- Create a true Network Operations Center.
- Automate standard move, add, change procedures to eliminate error.
- Institute rigid change control processes.
- Dedicate resources to documentation and recordkeeping.

**Objective 3.3:** Provide support and collaborate with external partners.

Strategies:

- Participate in industry committee and associations.
- Facilitate knowledge transfer with colleagues and external contacts.
- Present technologies at appropriate conferences and workshops.
- Participate in grant writing and development of new technologies.
- Partner with vendors and providers to extend the reach of the OSU network.
- Provide support to OSU-affiliated locations with no dedicate networking staff.

**Objective 3.3:** Provide useful in-demand services to outside entities.

- Partner with vendors and providers to extend the reach of the OSU network.
- Provide support to OSU-affiliated locations with no dedicated networking staff.
- Develop a customer advisory board.

# Goal Four. Create a stimulating, challenging, and professional workplace and earn recognition for OSU.

### **Critical Success Factors:**

- Increase professional development opportunities by 50%
- Develop and fund one or more Telecommunications departmental awards within the next 5 years
- Decrease gap between OSU salaries and industry pay by 50%
- Decrease absenteeism by 50%
- Maintain diversity in departmental staffing

#### **Objectives:**

**Objective 4.1:** Provide training to staff that enriches their knowledge and expertise and thereby their effectiveness and career development.

Strategies:

- Develop structured training programs for staff.
- Provide relevant certification opportunities.
- Increase funding available for training and development.

**Objective 4.2:** Create a positive and conducive workplace.

Strategies:

- Handle personnel issues quickly and confidentially.
- Clearly communicate departmental/divisional vision and strategy.
- Utilize automation to relieve overworked employees.
- Develop employee recognition programs.
- Develop semi-annual departmental gatherings.

**Objective 4.3:** Earn external recognition for OSU.

- Dedicate resources to marketing of OSU Telecommunications.
- Participate in industry committee and associations.
- Facilitate knowledge transfer with colleagues and external contacts.
- Present technologies at appropriate conferences and workshops.

**Objective 4.4:** Foster and support access in a diverse workplace.

- Consider diversity needs when hiring.
- Work with Vice President for Diversity to identify and eliminate any existing barriers to diversity that may exist.
- Enforce OSU policy regarding diversity and discrimination.

#### Goal Five. Manage telecommunications across the OSU system as a strategic resource.

### **Critical Success Factors:**

- Develop integrated, consistent management relationships with each branch institution
- Use strategic plan for key decisions
- Integrate and leverage information technology resources across the OSU system

### **Objectives:**

**Objective 5.1:** Provide strategic investment.

Strategies:

- Establish clear funding strategy for communications across the OSU system.
- Develop clear procedures for the rotation of equipment within the system.
- Participate in grant writing.

**Objective 5.2:** Provide strategic governance and direction.

Strategies:

- Complete and communicate the strategic plan.
- Meet regularly with staff and management at each location.
- Establish clear reporting structure and division of responsibilities.

**Objective 5.3:** Ensure integrated and consistent technology solutions across the OSU system.

- Establish clear funding strategy for communications across the OSU system.
- Develop clear procedures for the rotation of equipment within the system.
- Develop dedicated research and development resources.
- Institute quick and effective procedures for authorizing, architecting and controlling development of new services and solutions.