

# Iowa Communications Network

## PERFORMANCE REPORT

Performance Results  
Achieved for Fiscal Year  
2004

## TABLE OF CONTENTS

<i>SECTION</i>	<i>PAGE</i>
<b>INTRODUCTION .....</b>	<b>3</b>
<b>AGENCY OVERVIEW .....</b>	<b>4</b>
<b>STRATEGIC PLAN RESULTS .....</b>	<b>9</b>
<b>PERFORMANCE PLAN RESULTS .....</b>	<b>10</b>

## Introduction

I am pleased to present the Iowa Communications Network (ICN) performance report for fiscal year 2004 (July 1, 2003 – June 30, 2004). This report contains key information about how well the ICN has supported the State of Iowa in providing advanced communications services to authorized users of the network.

Major accomplishments for the year included:

- The first complete inventory of all 1,068 sites throughout the state in which ICN equipment is located.
- Establishment of an electronic bill, which greatly reduces printing requirements and staff hours.
- An upgrade of the video scheduling system.
- Establishment of a business review process for monitoring and improving the delivery of services and measuring service reliability.
- Testing of a mobile video service and wireless MPEG II and VLAN service for future delivery of video services.

The Iowa Communications Network has accomplished all of these despite a reduction in video subsidy, reduction in voice and data rates, and an increase in operating costs.

Key challenges for the ICN are to:

- Achieve funding streams needed to operate the network on a sustained basis.
- Keep pace with technology advancements.
- Anticipate future needs of our customers.

Keeping pace with technology is accomplished through use of a long range planning process, vendor and customer partnership groups, and staff attendance at technology conferences and advanced technical training courses. The greatest challenge is maintaining revenue streams to operate the network and replace outdated equipment and systems.

## **Overview**

### **ICN Vision**

To improve the quality of life for Iowans through advanced telecommunications services to authorized users in education, government, justice, and medicine by providing equal access to a state-of-the-art technology platform at a reasonable cost.

### **ICN Mission**

To provide authorized users the highest quality and technologically advanced educational, medical, judicial, and governmental telecommunications services and support to the State of Iowa in achieving economic growth.

### **ICN Guiding Principles**

1. Services and operations meet identified needs of authorized users.
2. Employees are empowered and expected to serve our customers by providing quality services.
3. Services are provided at reasonable cost to the network's authorized users.
4. Customers' needs are served through long-range planning and collaboration.
5. Collaborative decisions should be supported by facts, data, and analysis of risk.
6. Results and goals are driven by effective strategies and assessments.
7. Process improvement is continual.

### **ICN Core Function**

Integrate private and public telecommunications capabilities to produce cost-effective, finished services to support education, medical, judicial and government, and enrich people's lives. Activities may include programming, video creation, and digital educational.

### **Key Services, Products, and/or Activities**

The ICN is a full-service telecommunications provider, which includes full-motion, two-way, interactive video, data transport, and long distance voice communications.

#### **Voice Services**

- 1 Long Distance Dedicated Connection
- 2 Long Distance Switched Connection
- 3 Long Distance International Calling
- 4 Toll Free Dedicated Connection
- 5 Toll Free Switched Connection
- 6 Long Distance Dedicated Connection Certified User
- 7 Long Distance Switched Connection Certified User
- 8 Long Distance International Calling Certified User
- 9 Toll Free Dedicated Connection Certified User
- 10 Toll Free Switched Connection Certified User
- 11 Calling Card
- 12 Operator Services
- 13 Directory Assistance (411)
- 14 Prisoner Operator Services
- 15 Meet Me Conference
- 16 Conference Bridging (Operator Assisted)

- 17 Interactive Voice Response (IVR)
- 18 Wiring
- 19 On-site Technician Services (Polk Co.)
- 20 On-site Technician Services (Non-Polk Co.)
- 21 Electrical Services
- 22 Direct Dialing Directory Assistance
- 23 Non-ICN Voice Bridging
- 24 Collect Calls
- 25 Direct I/3 payment transfers and customer accounting for voice services
- 26 Basic Voice Service (Dial Tone, POTS)
- 27 Basic Service with analog phone
- 28 Basic Service with Polycom Soundstation
- 29 Basic Service with Optiset E Basic
- 30 Basic Service with Optiset E Standard
- 31 Basic Service with Optiset E Advance
- 32 Basic Service with Optiset E Advance Plus
- 33 Basic service with Optiset Liberator
- 34 Basic Service with Model 120 phone
- 35 Basic Service with Model 240 phone
- 36 Basic Service with Model 240E phone
- 37 Basic Service with Model 400 phone
- 38 Basic Service with Model 612 data phone
- 39 Basic Service with Model 624 phone
- 40 Basic Service with Model 624K phone
- 41 Basic Service with elevator phone
- 42 Voice Mail
- 43 Automatic Call Distribution (ACD)
- 44 Call Processing
- 45 Idle Phone Line
- 46 Stand-by Ready Line
- 47 State Metro Telephone Directory
- 48 US West Directory Listing

#### **Data and Internet Services**

- 49 ATM 56k/DSO
- 50 ATM T1
- 51 ATM DS3
- 52 ATM 10 Megabit Ethernet
- 53 ATM 100 Megabit Ethernet, VBR
- 54 ATM 100 Megabit Ethernet, CBR
- 55 ATM OC-3/OC-12 UBR
- 56 ATM OC-3/OC-12 VBR
- 57 ATM OC-3/OC-12 CBR
- 58 ATM DS3 VBR
- 59 ATM DS3 CBR
- 60 Dedicated Circuits 56k/DSO
- 61 Dedicated Circuits T1
- 62 Dedicated Circuits T1 Capitol Campus Only

- 63 Dedicated Circuits DS3
- 64 Dedicated DS3 Community College Intranet Link
- 65 Qwest Digital Access Surcharge (Lucas) Non-muxed DS3
- 66 Qwest Digital Access Surcharge (Lucas) 56k
- 67 Qwest Digital Access Surcharge (Lucas) DS1
- 68 Qwest Digital Access Surcharge (Lucas) DS1 LEC Extension
- 69 ICN Studio to Transmitter Link (STL)
- 70 ILEC Circuit Pricing - AT&T Circuits 56k or T1
- 71 Ethernet Circuits\* (TW-300)
- 72 Switched Ethernet over DWDM
- 73 Switched Redundant Ethernet over DWDM w/ Subscription Service
- 74 Secure (Via Firewall) Switched Redundant Ethernet over DWDM w/ Subscription Service
- 75 ISDN Primary Rate
- 76 Analog Bridge Circuits
- 77 Digital Bridge Circuits
- 78 56k Frame Relay
- 79 256k Fractional T1 Frame Relay
- 80 512k Fractional T1 Frame Relay
- 81 768k Fractional T1 Frame Relay
- 82 T1 Frame Relay
- 83 DS3 Frame Relay
- 84 56k Internet Access
- 85 T1 Internet Access
- 86 45 Megabit Internet
- 87 60 Megabit Internet
- 88 65 Megabit Internet
- 89 70 Megabit Internet
- 90 75 Megabit Internet
- 91 80 Megabit Internet
- 92 85 Megabit Internet
- 93 90 Megabit Internet
- 94 100 Megabit Internet
- 95 Agency Web Server, Internet Connection Service 1.5Mbps
- 96 Agency Web Server, Internet Connection Service 15Mbps
- 97 Primary or Secondary Domain Name Service (DNS)
- 98 Primary or Secondary Domain Name Service (DNS) change
- 99 News Service
- 100 Router Service Monthly
- 101 Dial Up Frame Relay
- Video Services**
- 102 Dialable Wideband Video H.320 Conference Fee
- 103 Dialable Wideband Video H.320 Audio Add-on
- 104 Dialable Wideband Video H.320 Local Call
- 105 Dialable Wideband Video H.320 LD Toll Call
- 106 Dialable Wideband Video H.320 International LD
- 107 Dialable Wideband Video H.323
- 108 Full-Motion Video Hourly K-12

- 109 Full-Motion Video Hourly Higher Education
- 110 Full-Motion Video Hourly Other Training
- 111 Full-Motion Video Hourly State Administrative
- 112 Full-Motion Video Hourly Federal Agency, US Postal, Telemedicine
- 113 New ATM Site/Dark Fiber (also applies to odd site addition)
- 114 New ATM Site/Leased Fiber (also applies to odd site addition)
- 115 New ATM Site (additional even sites)
- 116 New Site/Dark Fiber (also applies to odd site addition)
- 117 New Site/Leased DS3 (also applies to odd site addition)
- 118 Full Motion Additional Even Sites
- 119 Temporary DS3 Video - LEC included
- 120 Temporary DS3 Video - ICN carried, no LEC

### **Agency Customers**

- All accredited K-12 school districts and private schools
- All accredited public and private colleges and technical educational institutions
- State agencies
- Federal agencies
- United States Postal Service
- Hospitals and physician clinics (video and data services only)
- Public libraries

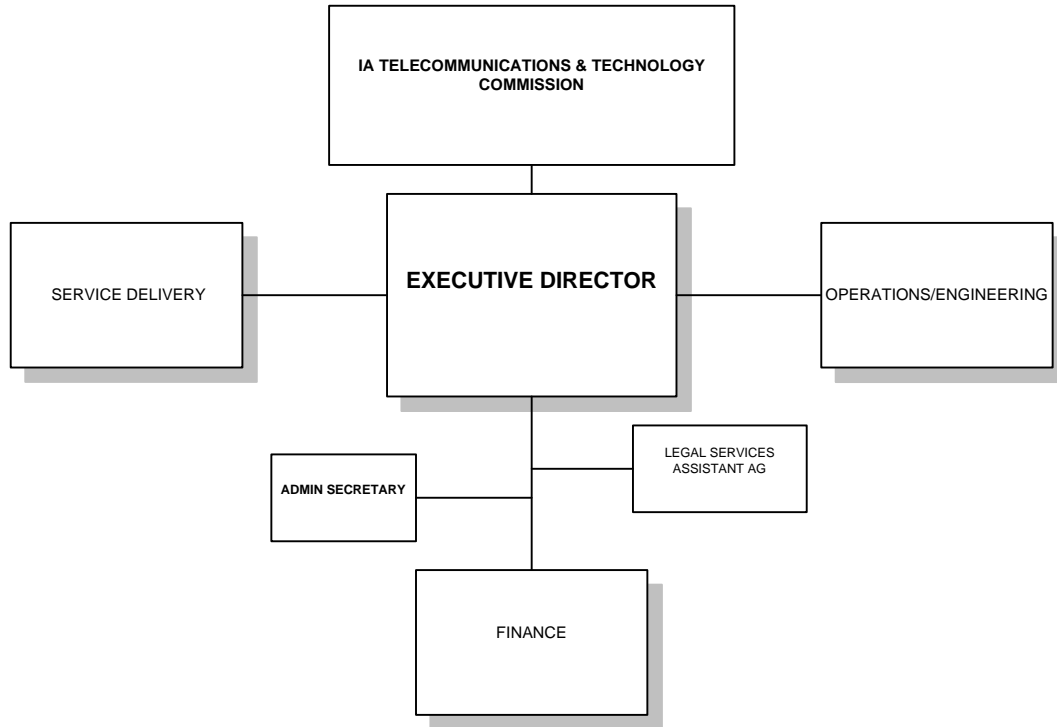
### **Stakeholders**

The taxpayers of the State of Iowa

**Organizational Structure**

The ICN’s table of organization includes an Executive Director, Deputy Director for Operations and Engineering, Deputy Director for Service Delivery, and Finance Division Manager.

# IOWA COMMUNICATIONS NETWORK



**ICN Staff**

The ICN is authorized 105 full-time positions. Gender makeup is approximately 55% male and 45% female. Racial diversity closely reflects that of the state’s population. The ICN serves its customers from a centralized location using contract maintenance contact teams located throughout the state.

**Locations**

The ICN operates out of Camp Dodge, a National Guard facility, on main post in building W-4. The Network Hub is located next to the State Emergency Operations Center at the Joint Forces Headquarters with fiber optic termination points (FOTS) and router sites at over 1020 locations throughout the State of Iowa.

**Budget**

The ICN does not receive any General Funding from the Iowa Legislature. Revenue is received from authorized and certified users for telecommunications services provided.



## **Strategic Plan Results**

### **Key Strategic Challenges and Opportunities**

The ICN is a young agency in a very competitive, highly-regulated, dynamic environment. The ICN started as an installer and has evolved into a full-service provider, upgrading the network with state-of-the-art equipment. The customer base is regulated by Chapter 8D of the Code of Iowa. However, the ICN's authorized users are required to use the network's services. The ICN's major success factor is that all authorized users voluntarily choose to use our services over those of our competitors.

The biggest challenges for the ICN are keeping pace with technology advancements, anticipating the future needs of our customers, and maintaining the revenue streams needed to maintain quality service. This is accomplished through use of a long-range planning process, vendor and customer partnership groups, and staff attendance at technology conferences and advanced communications technical training courses.

### **Goal 1**

To operate the network in an efficient and responsible manner providing the most economical service attainable under established performance standards to authorized users.

#### **Strategies:**

- Establish and maintain an effective business process to enable efficient service delivery to authorized users.
- Maintain a qualified workforce.
- Maintain effective and efficient operating systems.

**Performance Measure:** See performance plan results

### **Goal 2**

To achieve optimal utilization of the network's facilities by assuring future growth requirements will be met and sufficient network capacity is available to meet the needs of all users.

#### **Strategies:**

- Maintain and continually enhance the physical network to enable management to meet the needs of authorized users.
- Ensure the network's continual technology upgrades are in accordance with industry standards.
- Improve the network to provide viable redundant wide area network support for the delivery of services.
- Deploy latest technologies to enhance the speed and the capacity of the network.
- Continuity of Operations Planning to address natural or man-made disasters and emergencies.

**Performance Measure:** See performance plan results

### **Goal 3**

To provide essential advanced telecommunication services to all authorized users.

#### **Strategies:**

- Improve the network to enhance its ability to serve primarily as a distance-learning platform.
- Develop collaborative partnerships with stakeholders, which positions the network to provide future service offerings.
- Continually assess current services available to customers to determine if they are still sufficient.

**Performance Measure:** See performance plan results

### **PERFORMANCE PLAN RESULTS** **Core Function**

#### **Name: Telecommunications Services**

**Description:** Management of advanced telecommunications services.

**Why we are doing this:** To provide advanced telecommunications services that meet or exceed authorized user's expectations.

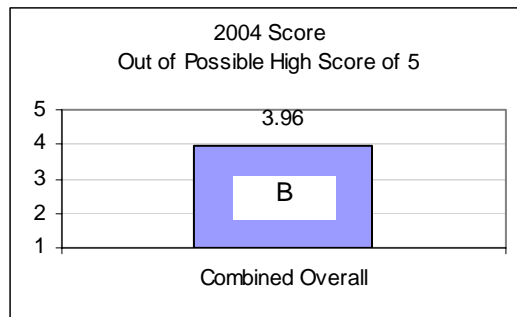
**What we are doing to achieve results:** Streamlining service delivery processes, monitoring and improving reliability of all our services, yet maintaining competitive prices.

#### **Results**

#### **Performance Measure:**

1. Customer satisfaction of ICN service reliability
2. Timeliness of delivery
3. Customer service and competitive pricing

**Performance Target:** 85% of our customers rate the ICN with a grade of B or higher.



**Data Source:** Customer surveys

**Data reliability:** The data is only as reliable as the honesty of the individuals completing the surveys presented by the appropriate customer representative.

**Why we are using this measure:** Customer satisfaction is the key to the success or failure of the ICN.

**What was achieved?** For the past year 85% of ICN customers surveyed rated the ICN at a B average (3.96 out of 5).

**Analysis of results:** In general customers are satisfied with the service, price, reliability and timeliness of service delivery.

**Factors affecting results:** None noted

**Resources used:** Internal assets of the ICN with no appropriated general funds.

### Service /Products/Activities

**Name: Resource Management**

**Description:** This is the measurement of the ICN's ability to consolidate the many different phone bills into a format that customers desire and to deliver those bills in a timely and accurate manner.

**Why we are doing this:** This service is a cost saving for our customers.

**What we are doing to achieve results:** The ICN has developed automated audit processes to ensure customers are only being billed for services received. The current goal is to have 92% of all bills error free; however, ICN is working with local exchanges to continually improve the percentage of error-free bills.

### Results

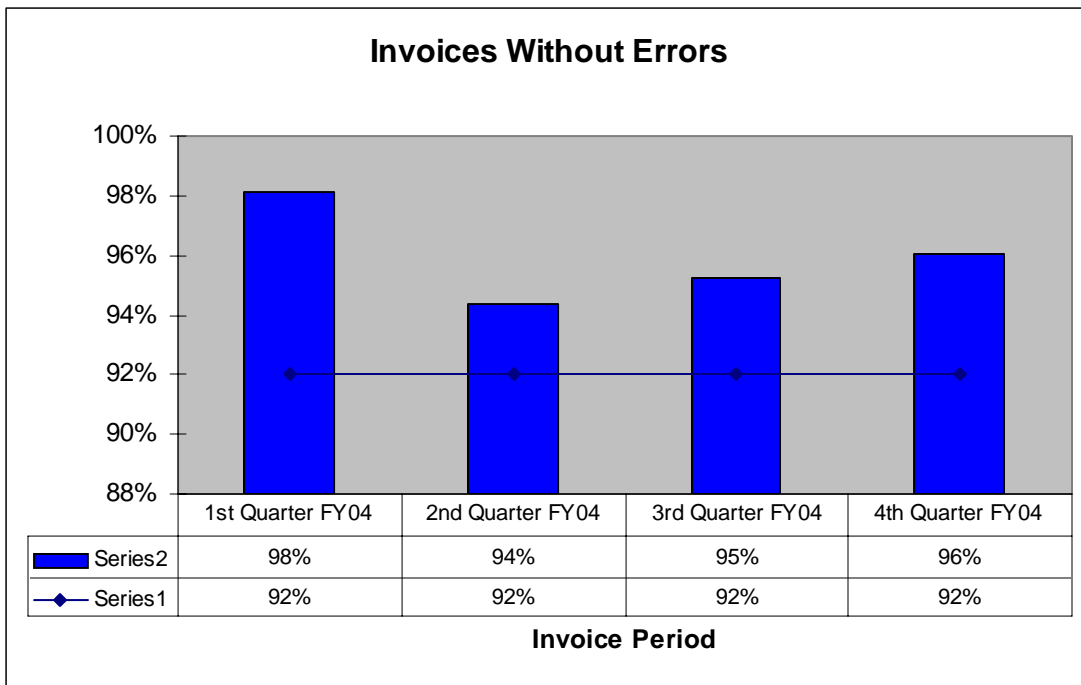
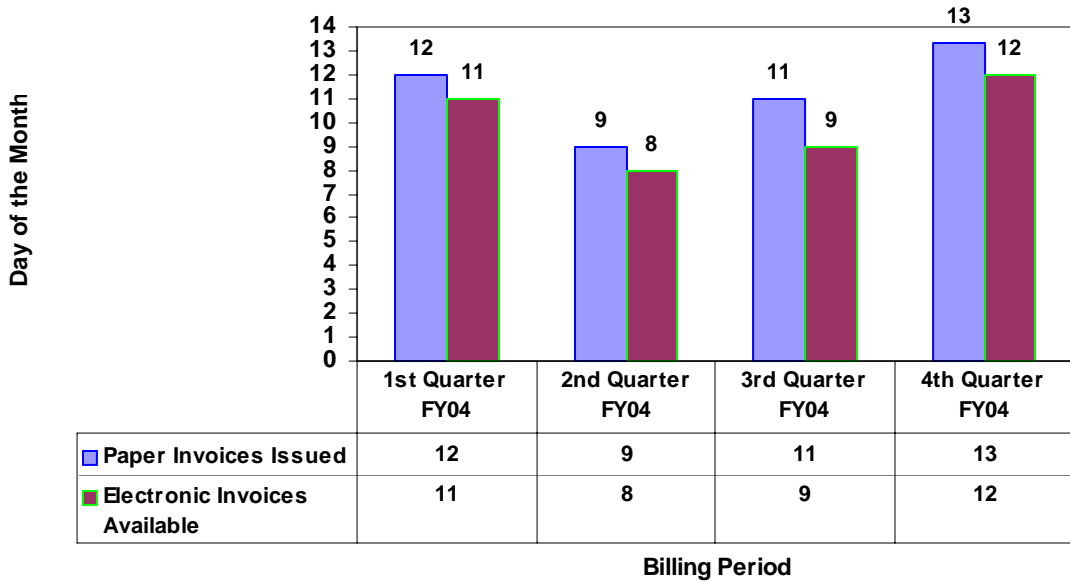
**Performance Measure:**

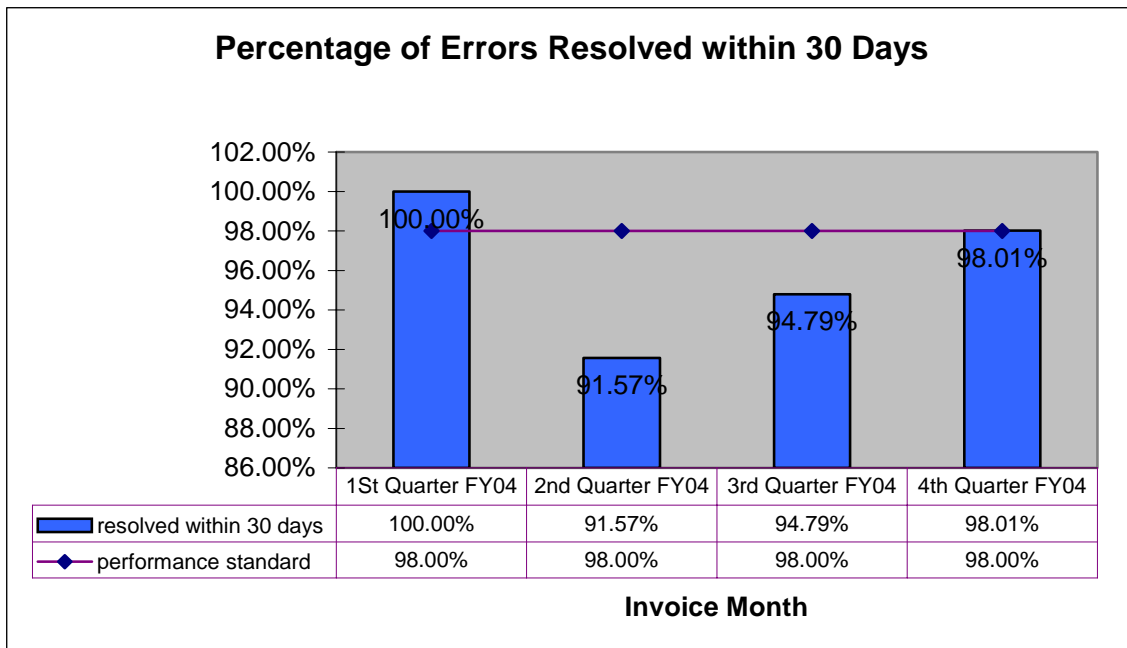
1. Percentage of invoices issued no later than by the 15<sup>th</sup> of each month
2. Percentage of invoices with errors
3. Percentage of invoice errors resolved in 30 days or less

**Performance Target:**

1. 98% of monthly invoices distributed no later than 15<sup>th</sup> day of each month
2. 98% of invoice error discrepancies resolved within 30 days after receipt of dispute
3. Invoice accuracy rate = >92%

Performance Standard - 15th of the month





**Data Source:** This information is extracted from the billing system.

**Data reliability:** High reliability

**Why we are using this measure:** Measure reliability of the billing system for accuracy and timeliness.

**What was achieved?** ICN has maintained an accurate billing system delivered in a timely manner meeting the needs of its customers.

**Analysis of results:** ICN has delivered an accurate bill in a timely manner to all of its customers.

**Factors affecting results:** None noted

**Resources used:** No general appropriated funds.

**Name: New Service Project Management Process**

**Description:** Development of a formal process when new service is considered for sale to a customer. The course of action includes a guide describing the development process of new services, and a Gantt chart that is used to keep the project on schedule.

**Why we are doing this:** To assist in the scheduling, tracking, and management of ICN resources in new service development.

**What we're doing to achieve results:** Delivery standards have been established for each of the many services the ICN offers its customers and these are monitored and reported to management monthly. When standards have not been met, root causes have been determined with corrective action taken to continually improve on service delivery.

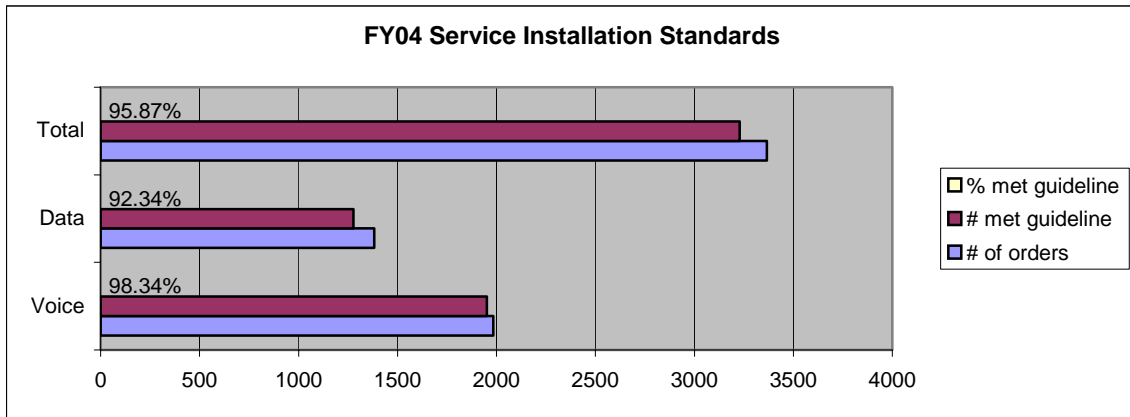
## Results

### **Performance Measure:**

1. Timely delivery of voice services
2. Timely delivery of data services
3. Timely delivery of video services

### **Performance Target:**

1. 95% of voice services delivered within the customer negotiated service install date
2. 95% of data services delivered within the customer negotiated service install date
3. 95% of video services delivered within the customer negotiated service install date



**Data Source:** This information was gathered from an automated service request and workflow system.

**Data reliability:** High

**Why we are using this measure:** This measurement is the key to how well the ICN is delivering its services.

**What was achieved?** Collectively the ICN met its established goal of 95% of new services delivered within the negotiated service install date.

**Analysis of results:** In general the ICN has been meeting service delivery goals. In selected cases the ICN needs to continue to improve meeting or exceeding the customer's expectations.

**Factors affecting results:** None noted

**Resources used:** No general appropriated funds

### **Name: Network management activity**

**Description:** This measurement is the reliability rate of the network backbone including network switch uptime and Internet connectivity.

**Why we are doing this:** To improve customer service.

**What we are doing to achieve results:** This is monitored on a 24/7 basis with immediate action taken to correct and service interruptions.

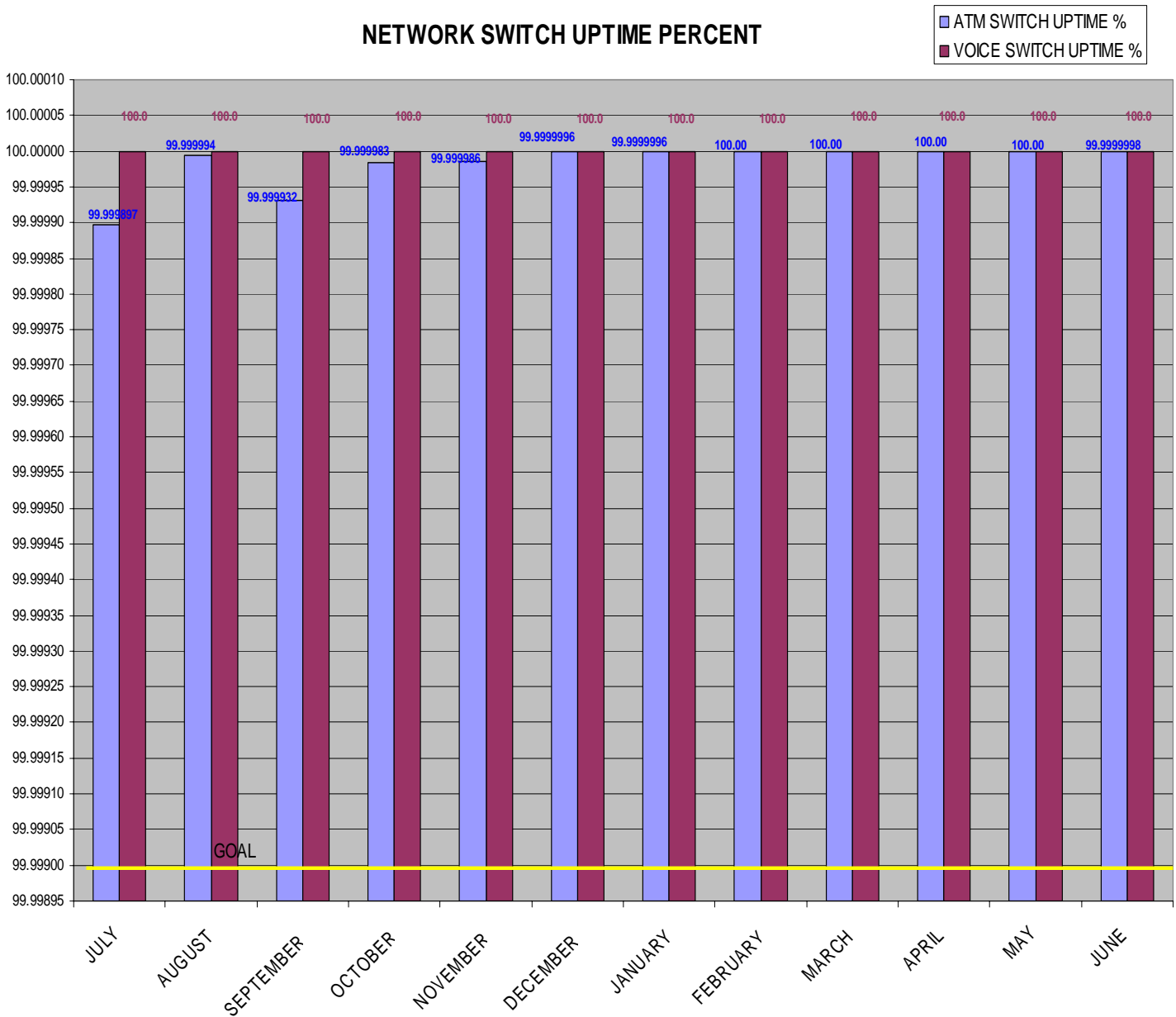
## Results

1. **Performance Measure:** Backbone network, voice, and Internet network reliability rate.

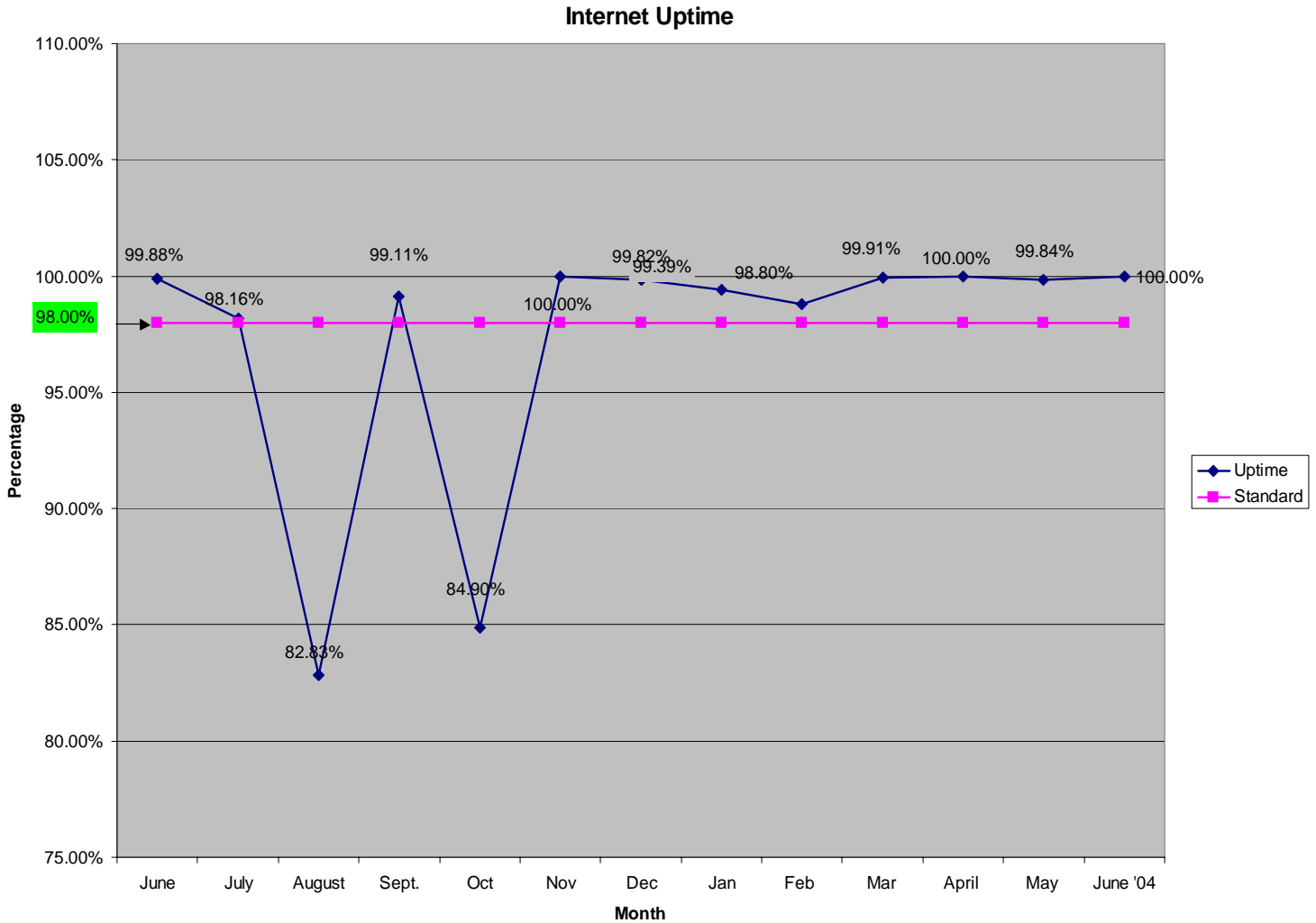
### Performance Target:

1. Backbone network ring transport systems and ATM/Frame relay and voice switched data network reliability of 99.9999%

NETWORK SWITCH UPTIME PERCENT



## 2. Internet network reliability of 97.999%



**Data Source:** The monitoring software systems of the network.

**Data reliability:** High

**Why we are using this measure:** Reflects the true reliability of the network.

**What was achieved?** Three key reliability ratings for the ICN: voice switch of 100%, ATM switch of 99.999%, and the Internet reliability rate, which fell short by .001% at 97.999%.

The months of August and October caused the average to drop below the 98% reliability rate goal.

**Analysis of results:** This network backbone has been very reliable throughout the year.

**Factors affecting results:** None noted

**Resources used:** No appropriated general funds.