VONAGE digitalvoice™

Presentation to NANC

January 22, 2003

VONAGE digitalvoice™

- Introduction
- Service Offering
- Numbering
- No Special Number Exhaust Issues Associated with VoIP Providers

Who is Vonage?

WRITTEN STATEMENT
of
MICHAEL K. POWELL
Chairman
Federal Communications Commission
on
Competition Issues in the Telecommunications Industry

Before the
Committee on Commerce, Science, and Transportation
United States Senate

Tuesday, January 14, 2003
9:30 a.m.

"2002 saw the introduction of reliable Internet telephony services as companies such as Vonage are providing an alternative to analog wired telephony over a broadband connection."

–FCC Chairman Powell*

2001

Q1 Company Founded

Q2 Raised $12MM

Q3 Technical Testing Begins

Q4 Vonage Consumer Beta Begins Testing

2002

Q1 Vonage DigitalVoice Released Into Production

Q2 Consumer Product Launches

Q3 Completed One Millionth Call on Vonage Network

Q4 Completed Five Millionth Call on Vonage Network

2003

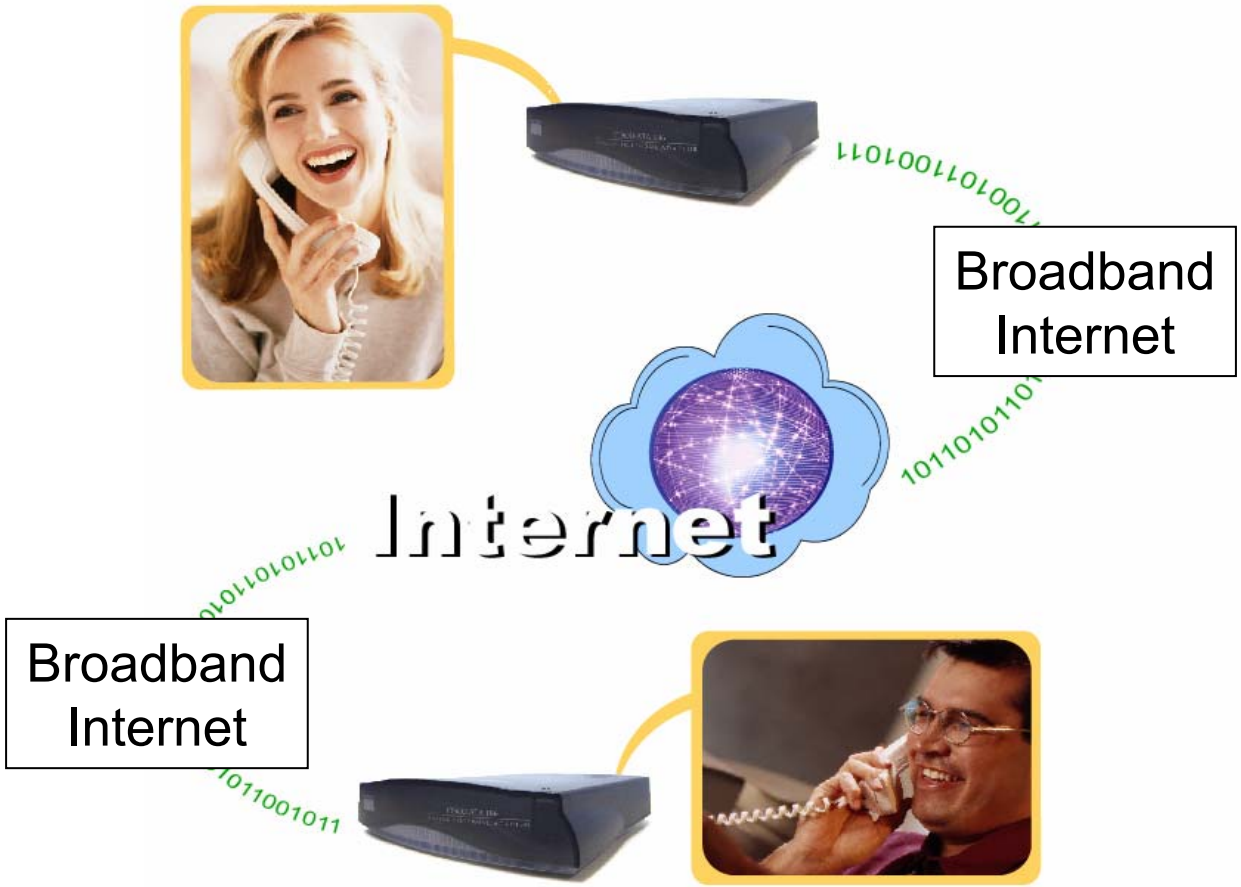
Q1 10,000 Customers

*FCC Chairman Powell in his remarks to the Senate Committee on Commerce, Science and Transportation, January 14, 2003

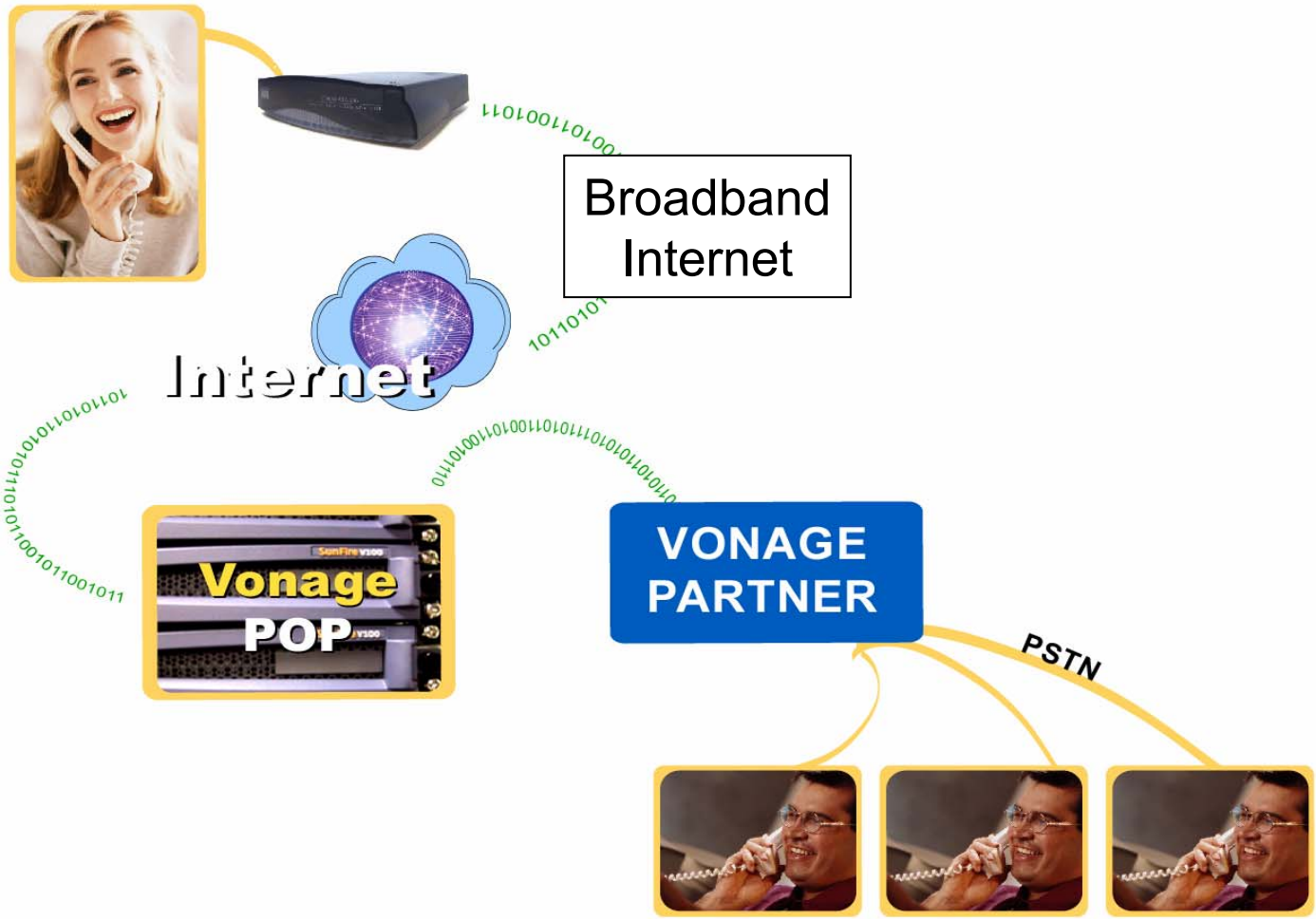
How It Works

- Plug-n-Play Customer Premises Equipment
- Works With Any Touch-Tone Phone

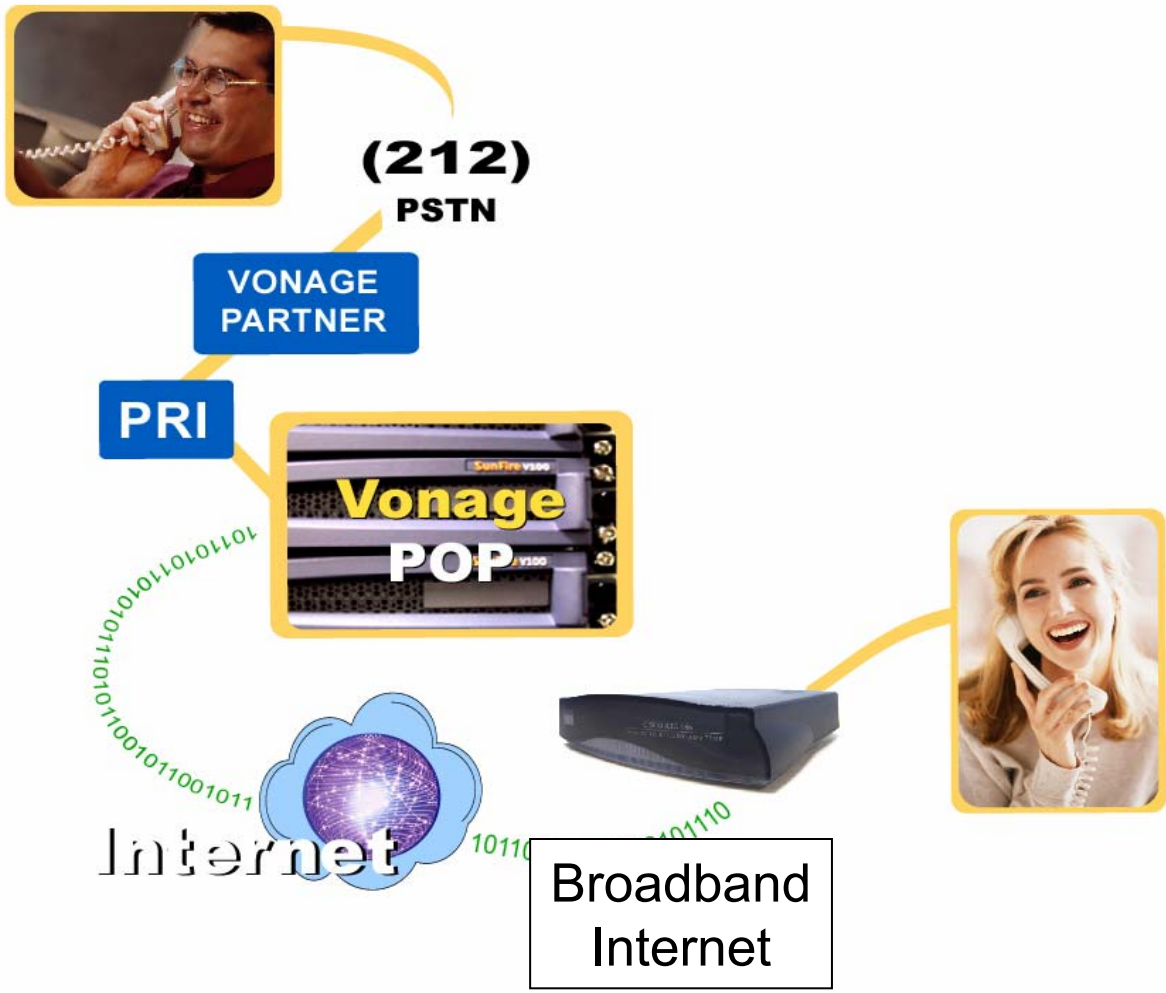
Vonage to Vonage Call Flow



Vonage to PSTN Call Flow



PSTN to Vonage Call Flow



Product Lines and Features

Standard PSTN Features

- Voicemail
- Caller ID
- Call Waiting
- Call Forwarding
- Call Transfer
- Repeat Dialing
- Call Return (*69)
- Caller ID Block (*67)
- Call Hunt
- Local Number Portability

Vonage DigitalVoice℠ Features

- Web Based Voicemail Retrieval
- Real-time Calling Activity
- Low International Rates
- Online Features Management
- Network Availability Number

Service Offering

Premium Unlimited Residential
Unlimited Nationwide Local & Long Distance Calling

$39.99

Premium Unlimited Business
Unlimited Nationwide Local & Long Distance Calling

$69.99

VONAGE digitalvoice

Local Unlimited Residential
Includes 500 Long Distance Minutes

$25.99

Basic 1500 Minute Business
1500 Nationwide Local & Long Distance Minutes

$39.99

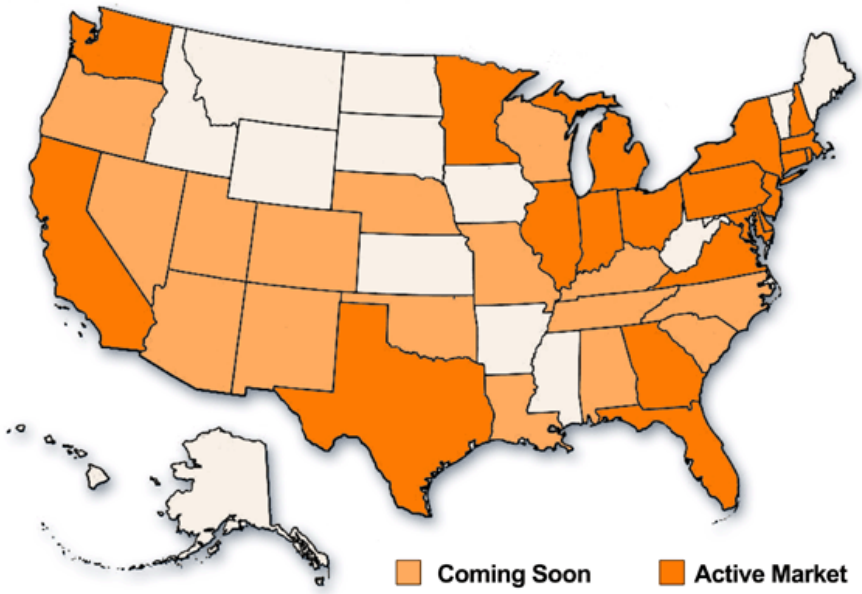
Service Area

By The End Of Q1

51 Markets In Service

162 Area Codes

894 Rate Centers



Vonage plans to offer service in the following cities in 2003

Q2 2003

Albuquerque, NM	Tampa Bay, FL	Cincinnati, OH
New Orleans, LA	Charlotte, NC	Indianapolis, IN
Louisville, KY	Charleston, SC	San Antonio, TX
Omaha, NE	Raleigh-Durham, NC	Milwaukee, WI
Norfolk, VA	Nashville, TN	Salt Lake City, UT
Oklahoma City, OK	Memphis, TN	Greenville, SC
Jacksonville, FL	Birmingham, AL	Kansas City, MO
Harrisburg, PA	Greensboro, NC	Columbus, OH
Grand Rapids, MI		

Vonage currently offers service in the following states/area codes:

NY 212, 917, 646, 718, 516, 631, 914, 845, 518, 585, 716, 315

NJ 732, 201, 908, 973, 609, 856

CA 415, 408, 510, 650, 707, 831, 925, 858, 619, 310, 323, 213, 818, 714, 805, 661, 562, 626, 949, 909, 760, *916

DC 202

TX 214, 254, 469, 713, 817, 903, 940, 979, 832, 936

FL 305, 561, 786, 954, 321

GA 404, 678, 706

IL 312, 773, 847, 630, 708, 815

MA 617, 781, 508, 978, 413

DE 302

IN 219

PA 215, 267, 484, 610, 412

MD 240, 301, 443, 667, 410

MN 612, 763, 952, 651

CT 203, 860

WA 206, 253, 360, 425

VA 703

MI 248, 313, 517, 586, 734, 810

OH 440, 216

NH 603

RI 401

CO* 303,720

OR* 503, 971

AZ* 602, 480, 623

MO* 314, 636, 557

NV* 702

*By January 2003

POP Last Updated: 01.06.03

Service Features

- **Vonage Maps IP Addresses to Phone Numbers**
  - Vonage uses numbers as a unique identifier for IP addresses
  - Number is assigned remotely to the MTA IP address when device registers with our network
  - IP addresses are dynamic, therefore Vonage can assign MTA any number regardless of physical location
  - Majority of Vonage customers choose native NPAs
  - One number per account (MTA)
- **Number Mobility – MTA Device Is Similar to Wireless Phone**
  - MTA is mobile throughout US wherever there is broadband
  - Like a wireless phone, people can reach you at the same phone number regardless of physical location
- **Keep Your Existing Number**
  - Vonage LEC partners support local number portability
  - LNP allows Vonage customers, via their partnerships, the ability to migrate their existing phone numbers to Vonage service
  - Customers that leave Vonage/underlying partner can also take their number with them to another provider

How does Vonage obtain numbers?

- Vonage partners with Tier 1 local exchange carriers
- Numbers come from common carriers
- Partners then provide Vonage telephone numbers from their existing blocks
- Calls delivered to Vonage via PRI circuit at a corresponding gateway relative to the coverage area
- Vonage then dynamically assigns a number from this range via IP to a customer's MTA

VoIP Impact Inconsequential

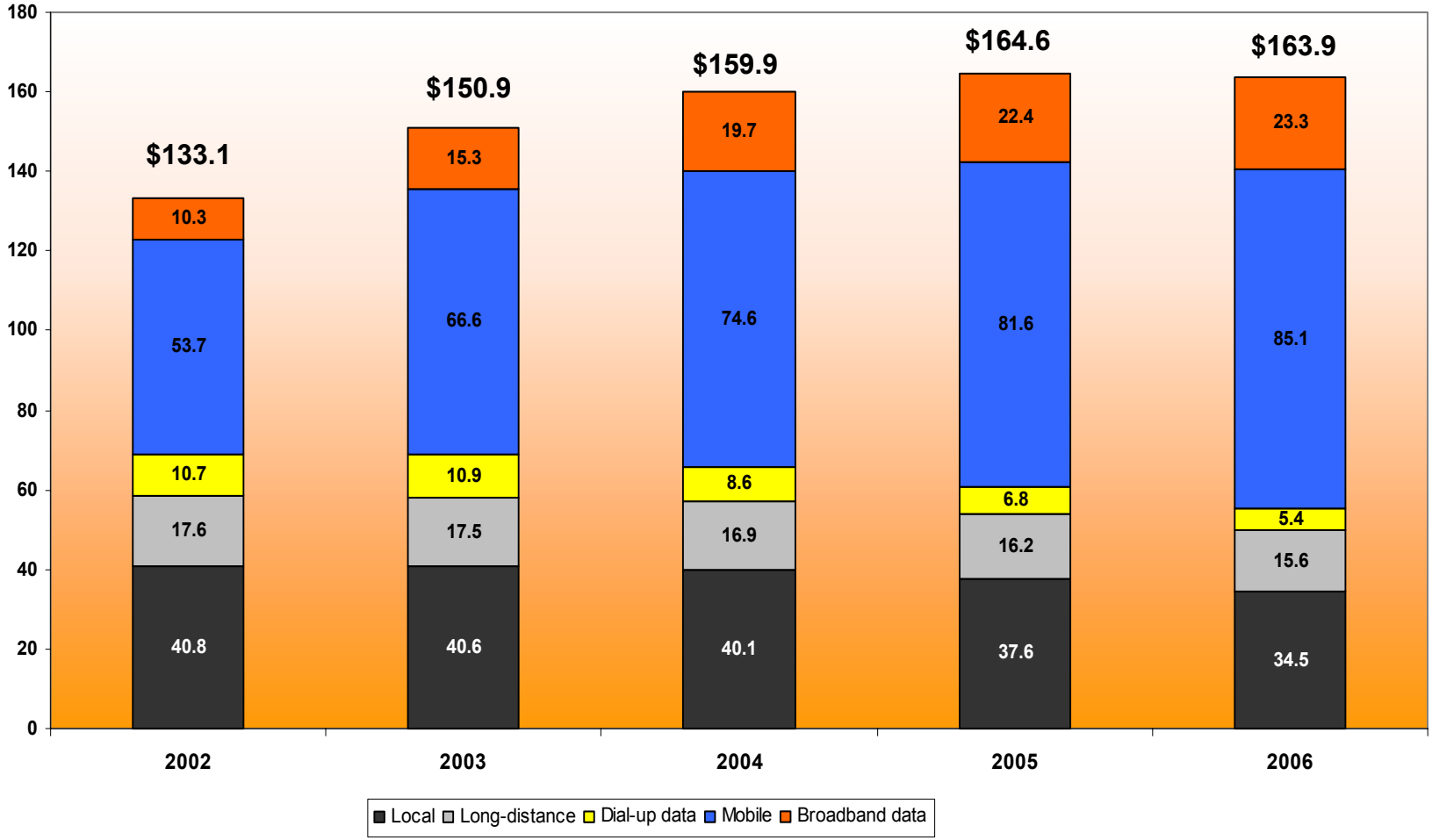
- **Numbers come from a common carrier compliant with NANPA**
- **Vonage purchases telecommunications services/ receives number resources from common carrier like any other large business customer**
  - Large businesses receive blocks of numbers for PBXs and allocate numbers to users attached to PBX
  - Some paging carriers still use blocks of numbers from LECs to assign to their customers

VoIP Impact Inconsequential

- **Ability to offer number outside of customer's "home" rate center similar to FX, wireless**
  - LECs offer customer similar ability through FX service
  - Wireless carriers also offer the ability to take foreign numbers physically into another geographic location
- **Impact of VoIP on numbering pool at this juncture is neutral**

Wire Lines Declining

Annual U.S. Residential Revenue in $billions by telecom service type



Source: Forrester Research, Inc. – data represents line fees only, does not reflect content fees like directory services

Number Exhaust Slowing Down

- 2002 – first year in history US wireline access lines declined*
- Migration from dial-up to broadband adds numbers back to pool
- Wireline access lines will likely continue to decline indefinitely with competition from wireless services and broadband
- FCC and state PUCs implementing number conservation measures such as 1,000 block pooling

*FCC Chairman Powell in his remarks to the Senate Committee on Commerce, Science and Transportation, January 14, 2003, page 4

Conclusion

- Impact of new technologies on numbering resources is neutral at worst
- Issue of exhaust is being addressed by the FCC and State PUCs' current numbering conservation efforts
- No special numbering conservation measures are needed due to VoIP