

Presented to:

APEC INFO SUMMIT MEETING

CHINA TELECOM REVOLUTION  
A ROAD to BROAD BAND STRATEGY

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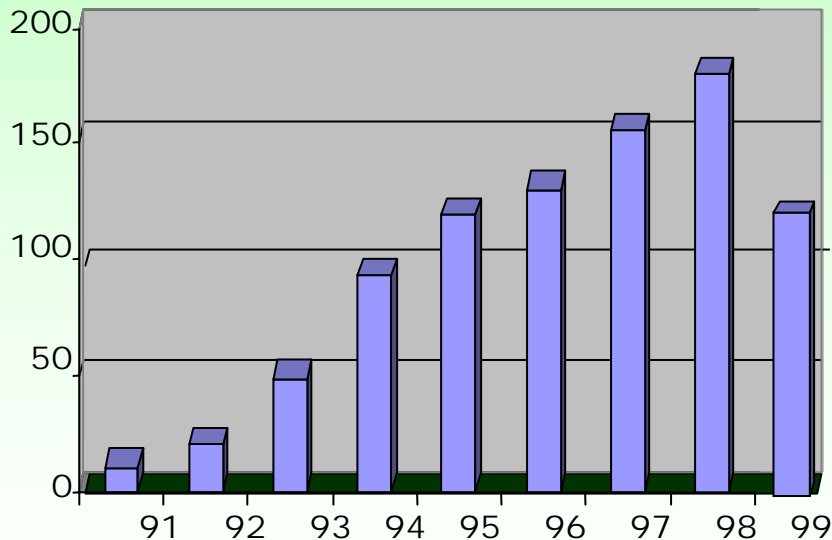
# Key Drivers

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## Economic Growth & Heavy CAPEX

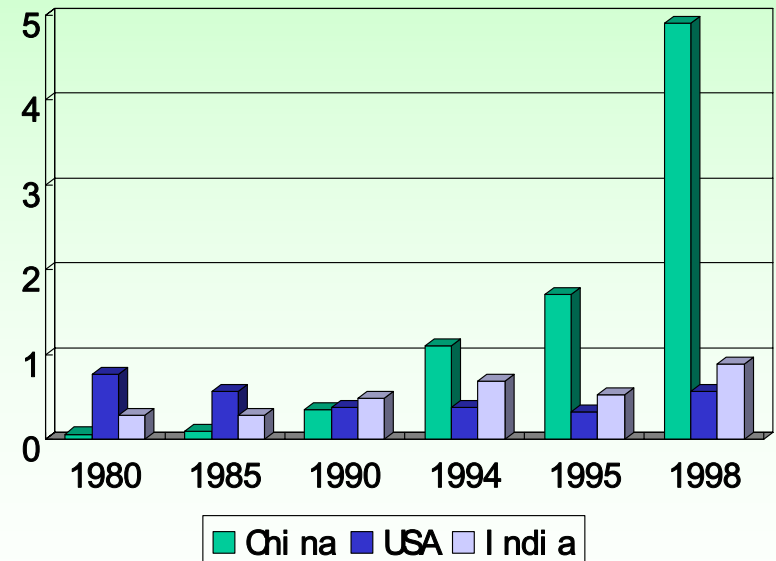
- ▶ A decade double digits growth and survived 7-8% facing Asian crisis
- ▶ CAGR 50% & 30% in the past 8 and 5 years respectively
- ▶ Big drop in capital investment according to MII statistics in Sept.,99
- ▶ Telecom investment accounts for 6.1% of GDP versus the added value it creates contributes 4.9% to GDP growth in 1998

MPT/MII Annual CAPEX in \$100 MM



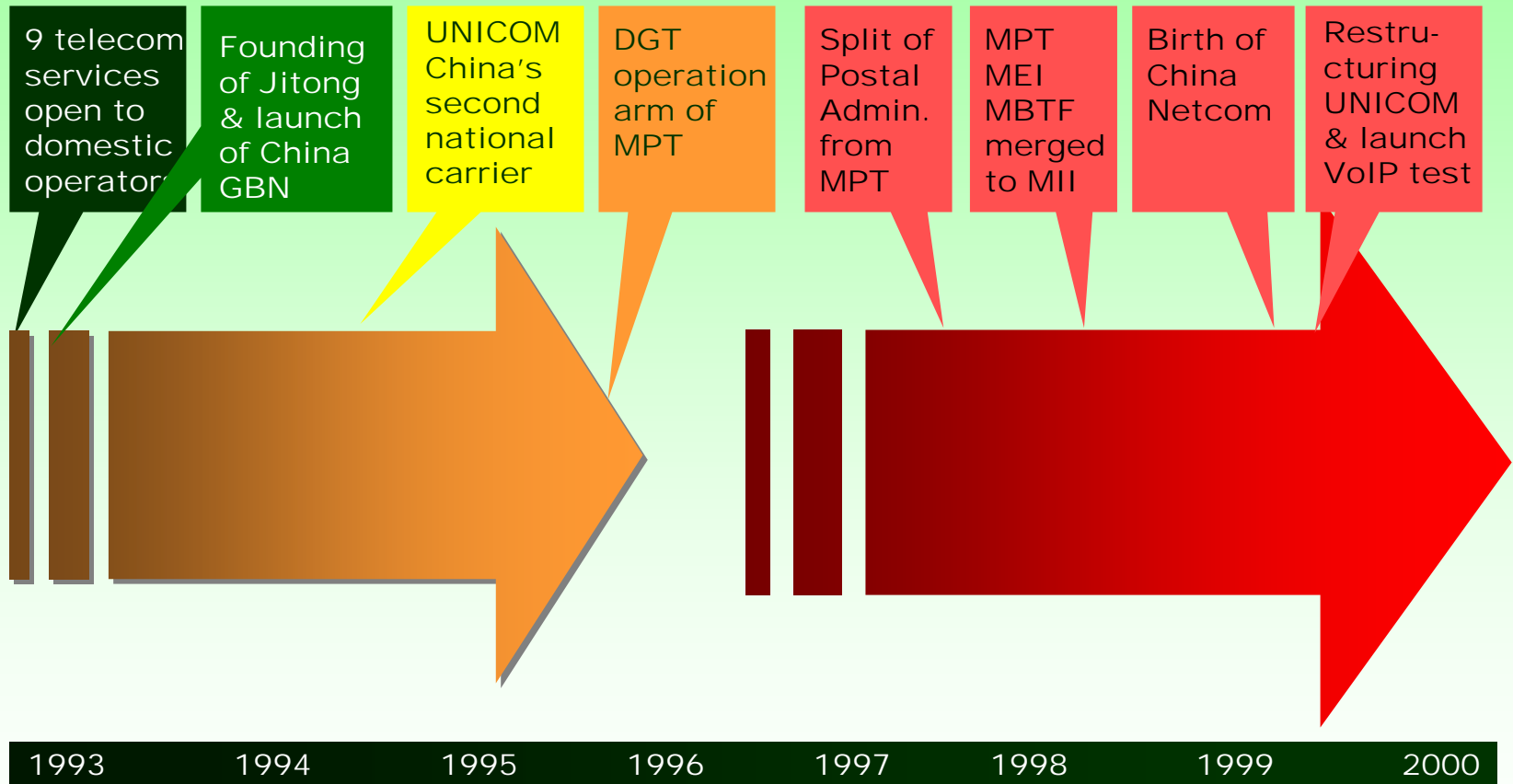
Source: MPT & MII Statistics

Comparison of CAPEX % ratio in GDP



# Key Drivers

## Deregulation Process

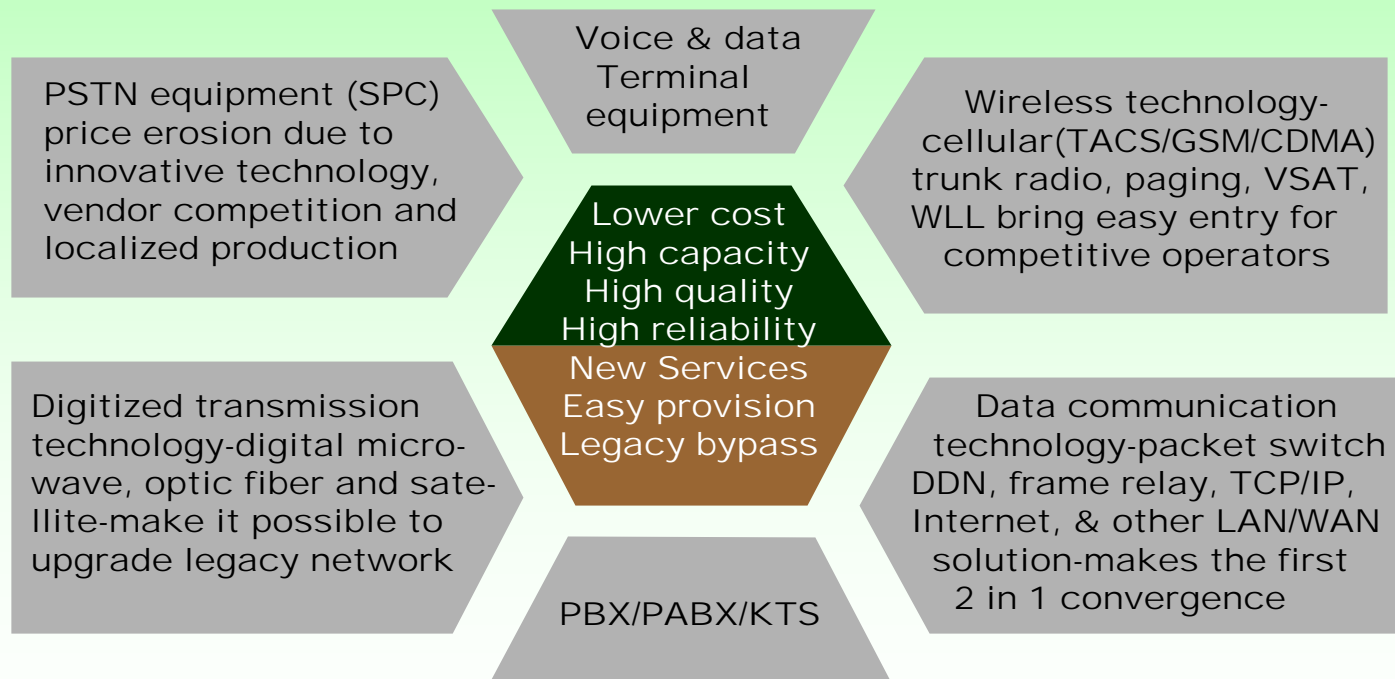


# Key Drivers

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## Technological Advancement

- ▶ Switching technology
- ▶ Transmission technology
- ▶ Wireless communication technology
- ▶ Data communications, packet and IP technology
- ▶ CPE & Terminal equipment

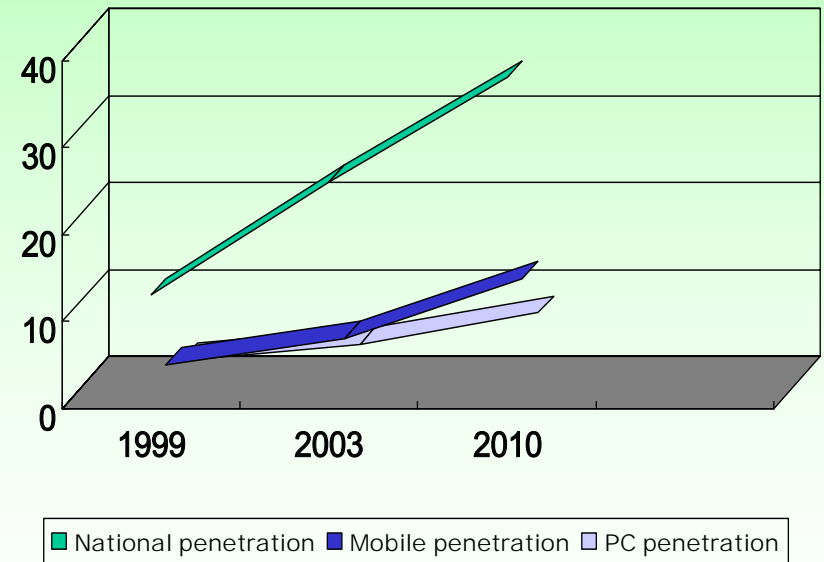
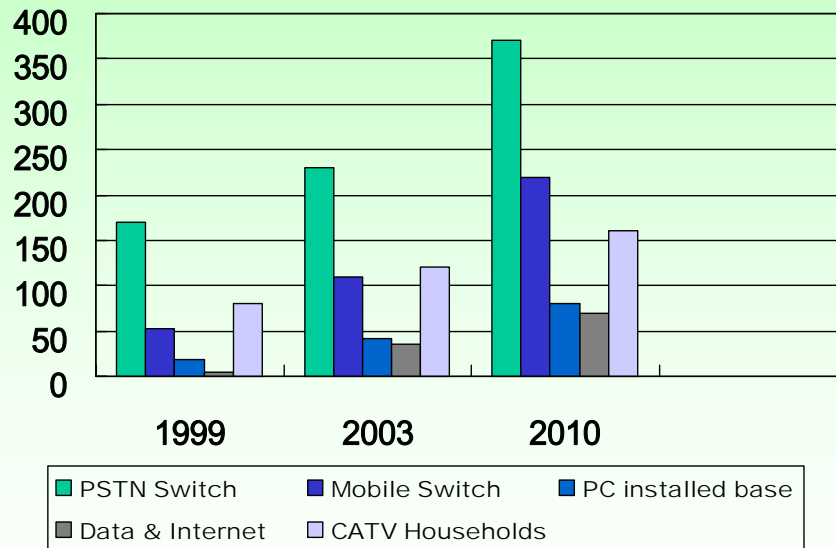


# Future Growth - Pros & Cons

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## Major Forecast

- ▶ MII set 10 years long term target for fixed & mobile voice
- ▶ Deploy SDH/DWDM/ATM backbone to merge voice and multimedia
- ▶ Data subscribers & market growth will grow at a CAGR of 60-80%
- ▶ Further deregulation due to equal access demand and WTO entry

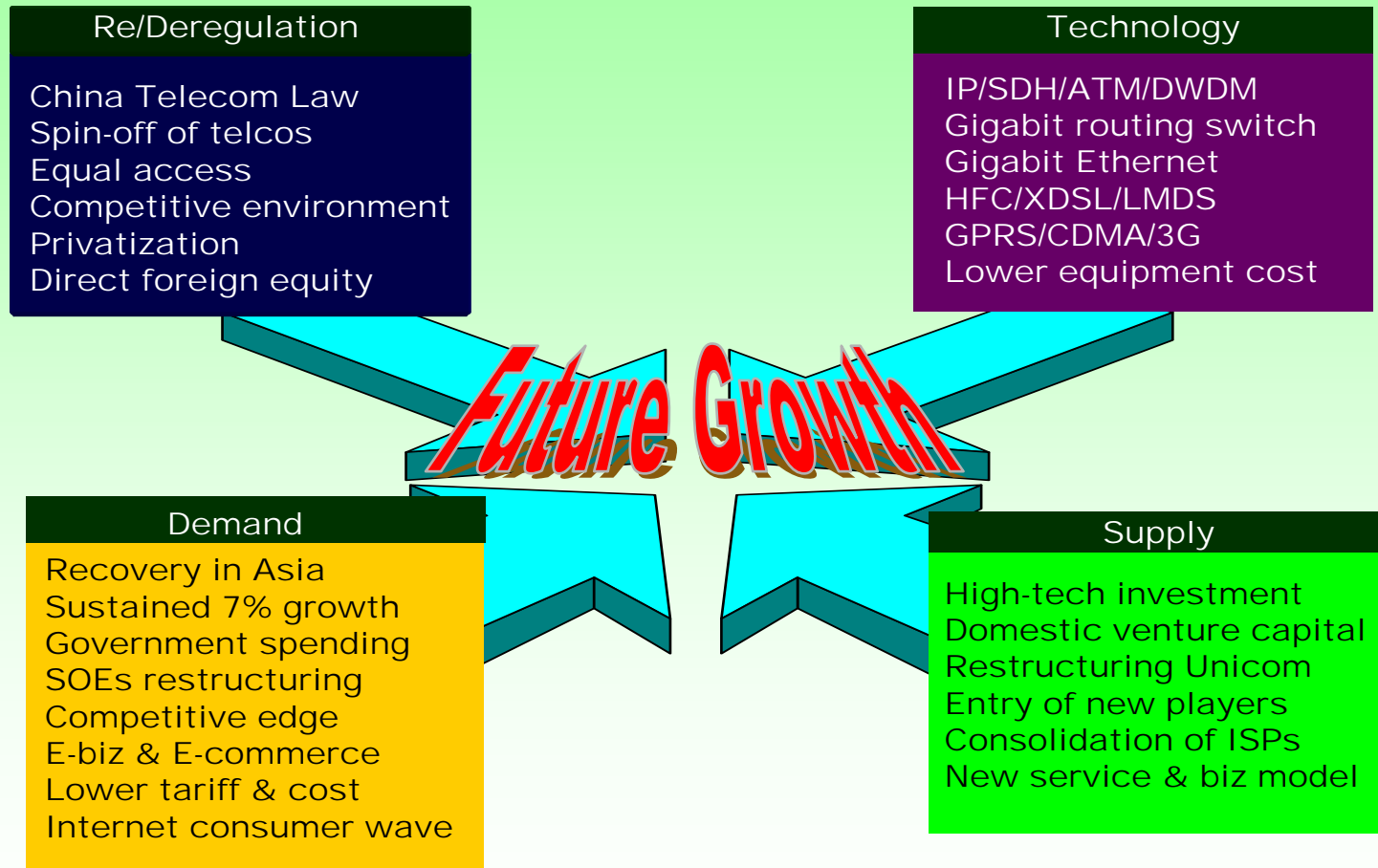


Source: MII & BDA forecast

# Future Growth - Pros & Cons

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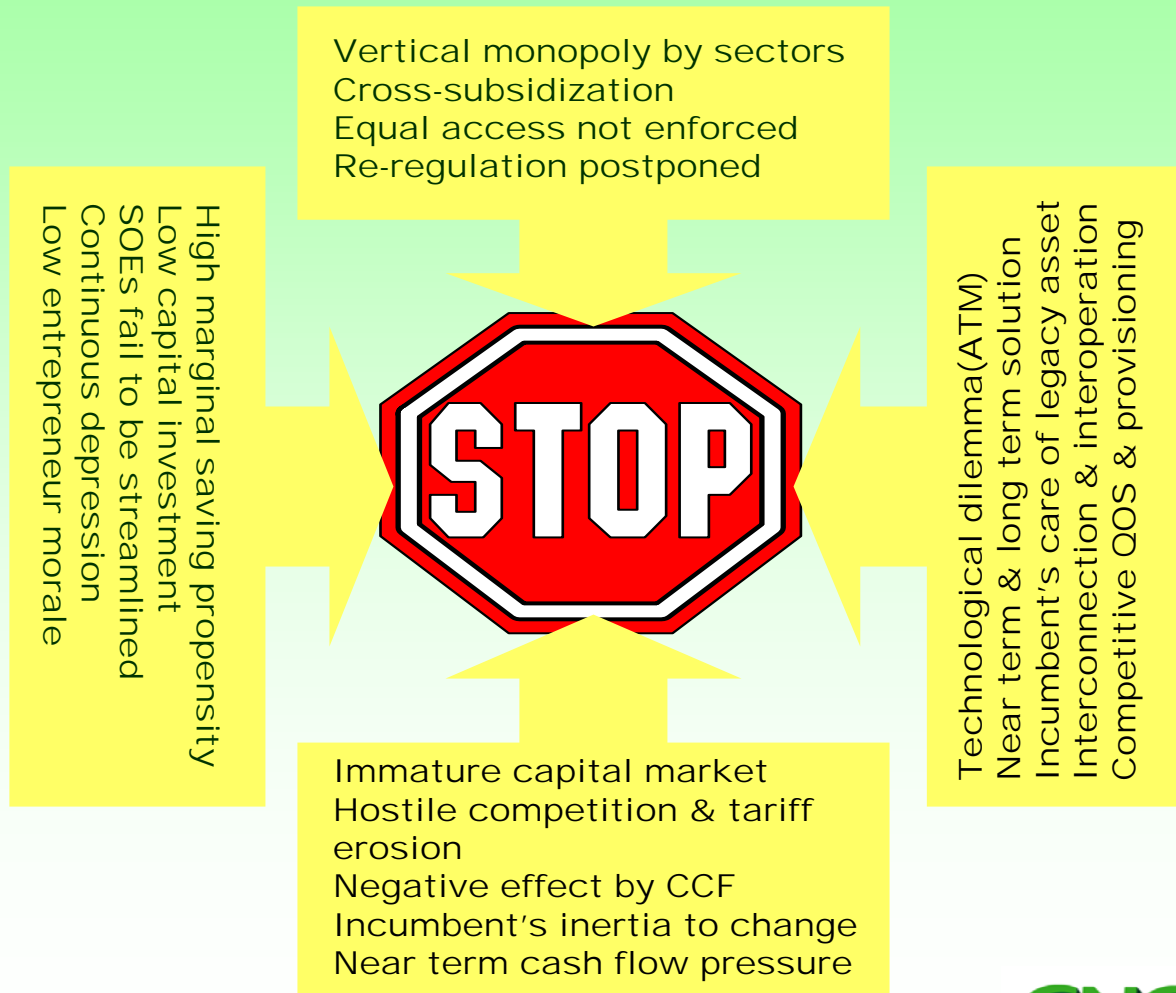
## Positive Drivers





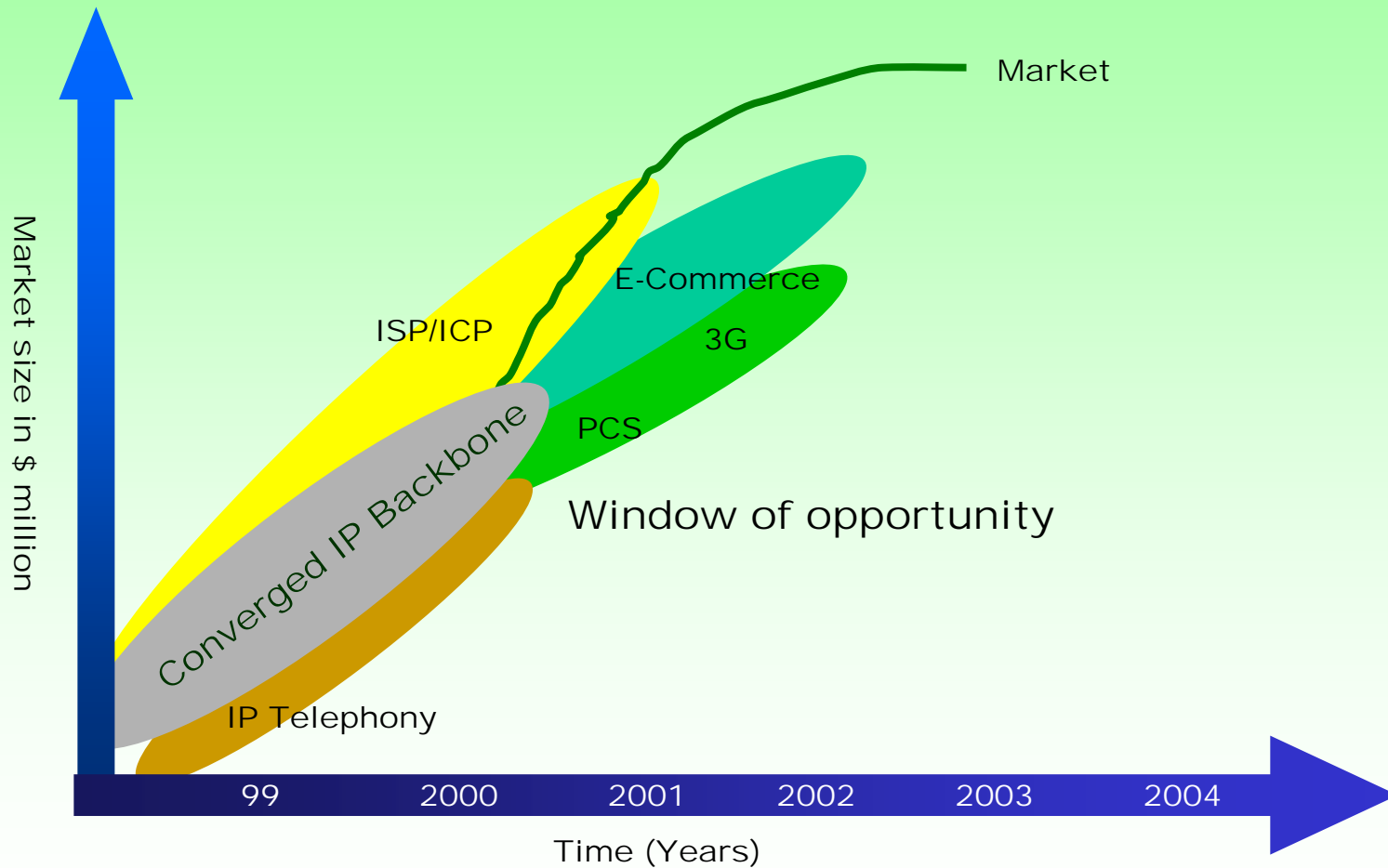
# Future Growth - Pros & Cons

## Negative Barriers



# Opportunity For Start-Up

Window of Opportunity



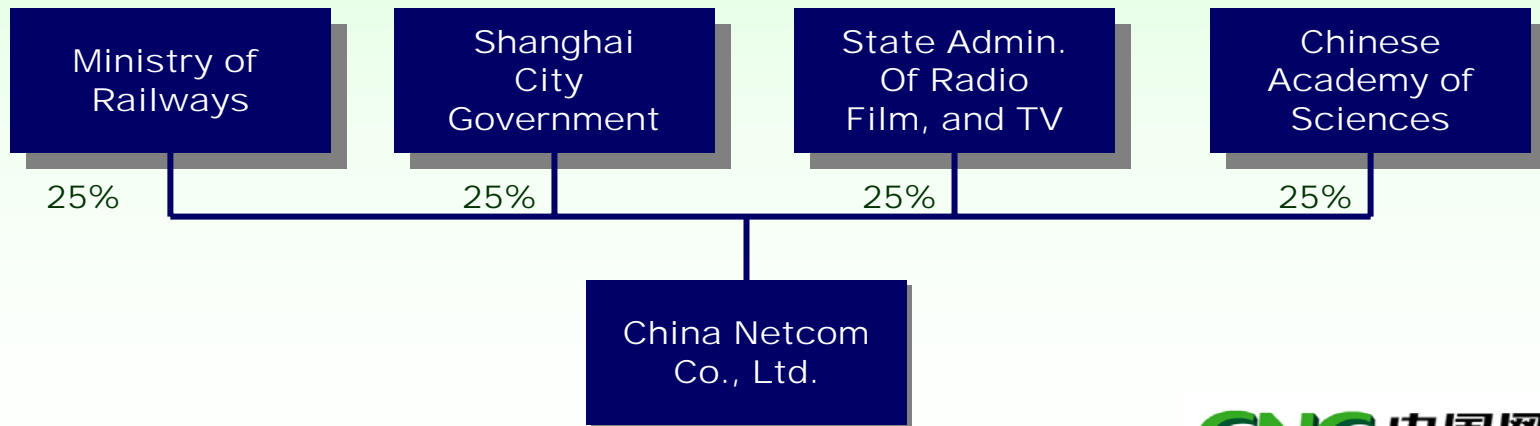
# The Birth Of China Netcom

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## Existing Shareholders & Structure

- ▶ Chinese Academy of Sciences
  - ➔ Technology, R&D and Internet backbone with biggest subscriber base
- ▶ Ministry of Railways
  - ➔ Nationwide inter/intra provincial FO and ROW backbone
- ▶ State Administration of Radio, Film and Television
  - ➔ Nationwide FO backbone with most valuable last mile access broadband
- ▶ Shanghai Municipal Government
  - ➔ Pilot municipality for intra-city FO access network infrastructure



# The Birth Of China Netcom

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## Mission & Goals

- ◆ Become the leading independent developer and operator of converged telecom services provider in China
- ◆ Maximize return on shareholder's investment
- ◆ Provide role model for China's SOE reform by both technological and organizational innovation within an environment of knowledge based society and telecom deregulation
- ◆ Create a pool of talent for China's telecom industry in next decade

# The Birth Of China Netcom

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## Environment

- ◆ Telecom deregulation and re-regulation expected to firm up in China before entering into new century
- ◆ Emerging convergence of telecom, computer and CATV network
- ◆ Voice traffic will dominate the market while data and Internet related business will be fully geared engine for growth

Privatization of state own enterprise sector, explore new way of management of human resources intensive companies

# The Birth Of China Netcom

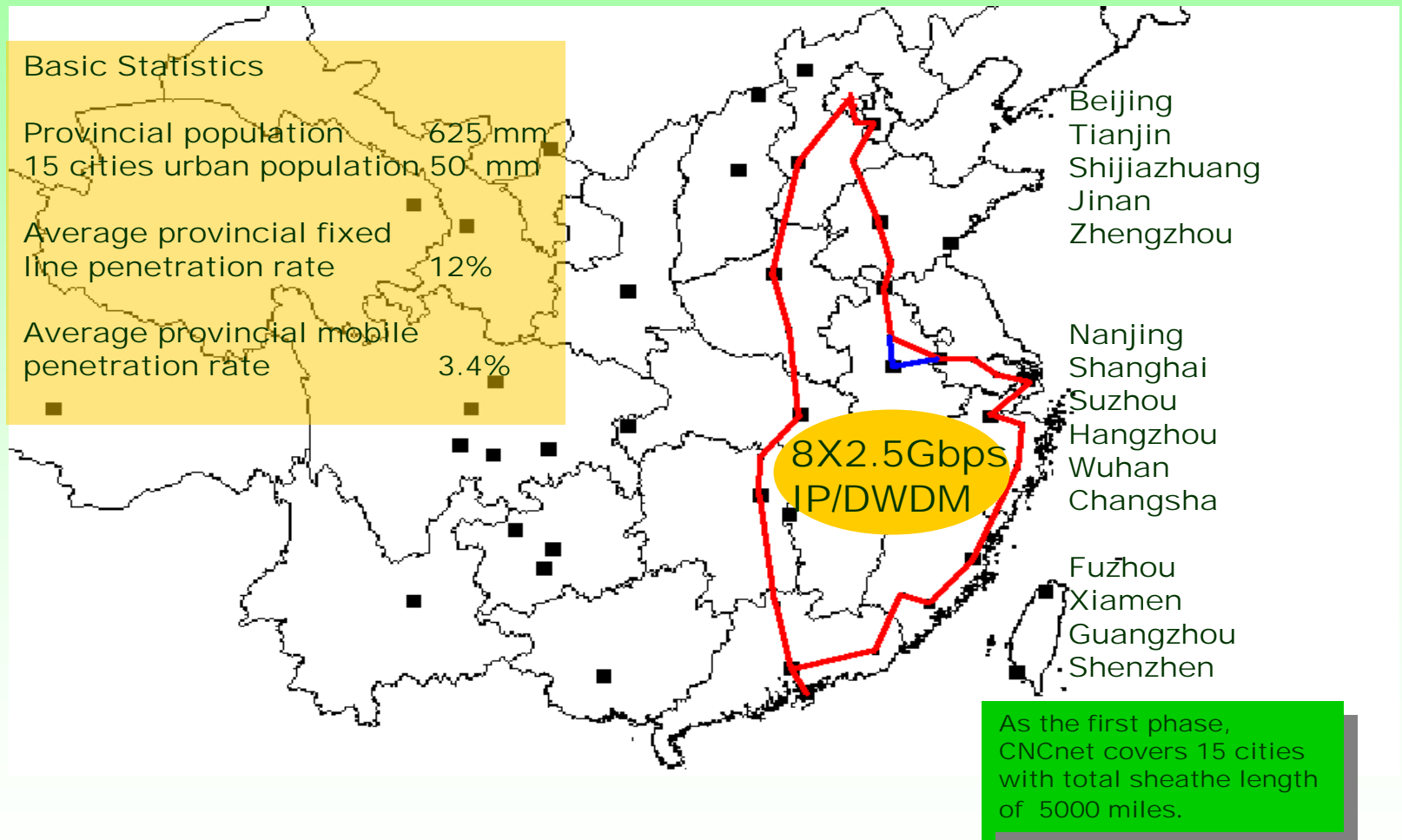
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## CNC's Business Strategy

- ◆ Build, own and operate a nationwide IP/DWDM fiber optic backbone network
- ◆ Build, own and operate commercial access networks in major cities of China
- ◆ Build, own and operate independent international gateway

# CNCnet™ - A Broad Band Solution

## CNCnet™ Roadmap Phase I

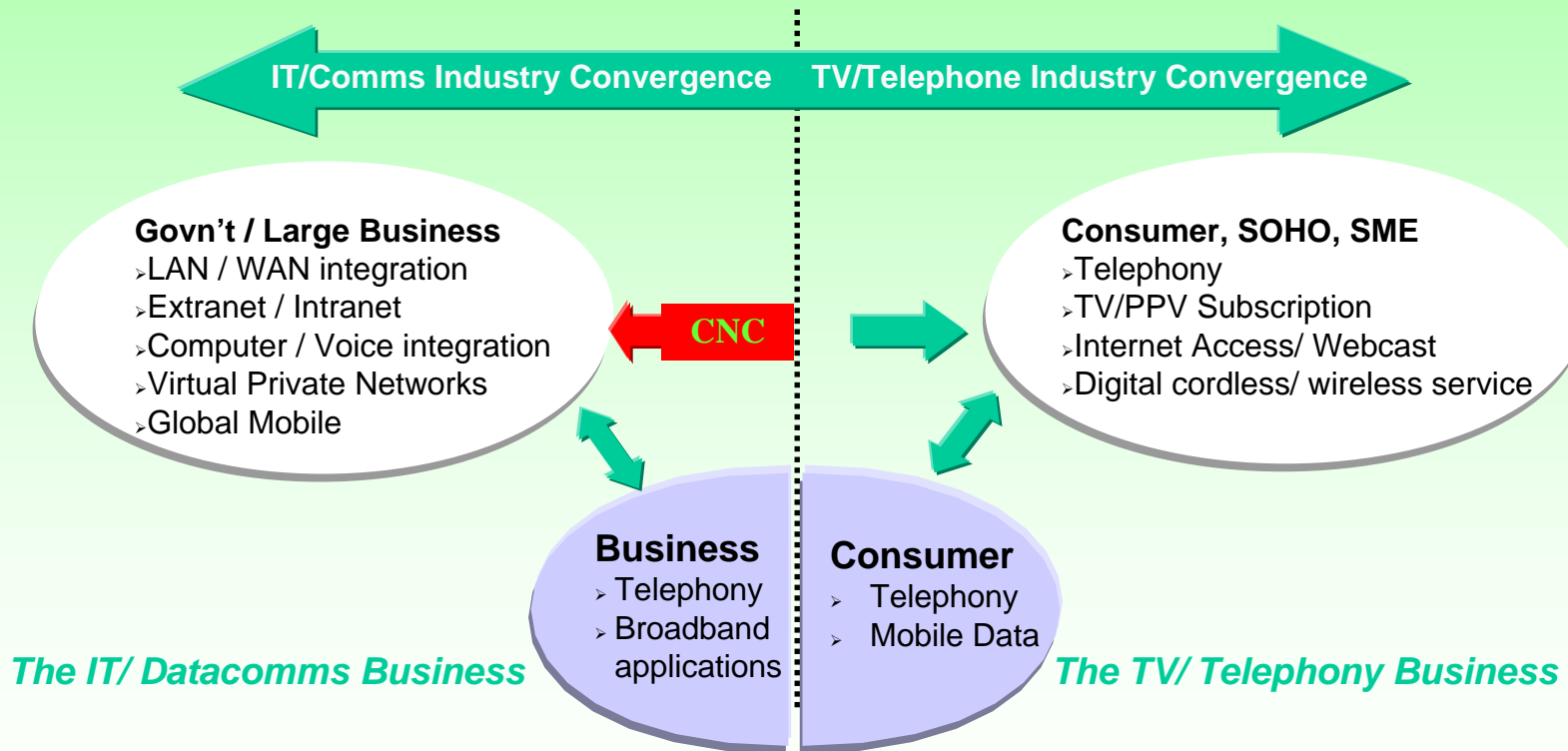




# CNCnet™ - A Broad Band Solution

## CNC Business Model - B to B Focus

Radically different customer requirements combined with the potential for offensive and defensive FMC strategies will drive a much more focused approach to the market



# CNCnet™ - A Broad Band Solution

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## CNCnet™ Development & Marketing Strategy

### ➤ Rapid Deployment

- High population area
- High revenue area
- Launch VoIP for short break even

### ➤ Broadband Backbone

- IP over DWDM
- Fiber & Right of way
- HFC/Wireless for local access
- Partnership for expansion
- Capex matches customer growth

### ➤ Service Segmentation

- Carrier's carrier wholesale
- Backbone wholesale
- ISP wholesale
- Government & business clients
- Access platform/ISP/Host pooling
- SMEs/SOHO
- E-Commerce

### ➤ Target Business Customers

- Competitive differentiation
- Well defined services package
- Competitive pricing
- Focus on customer service

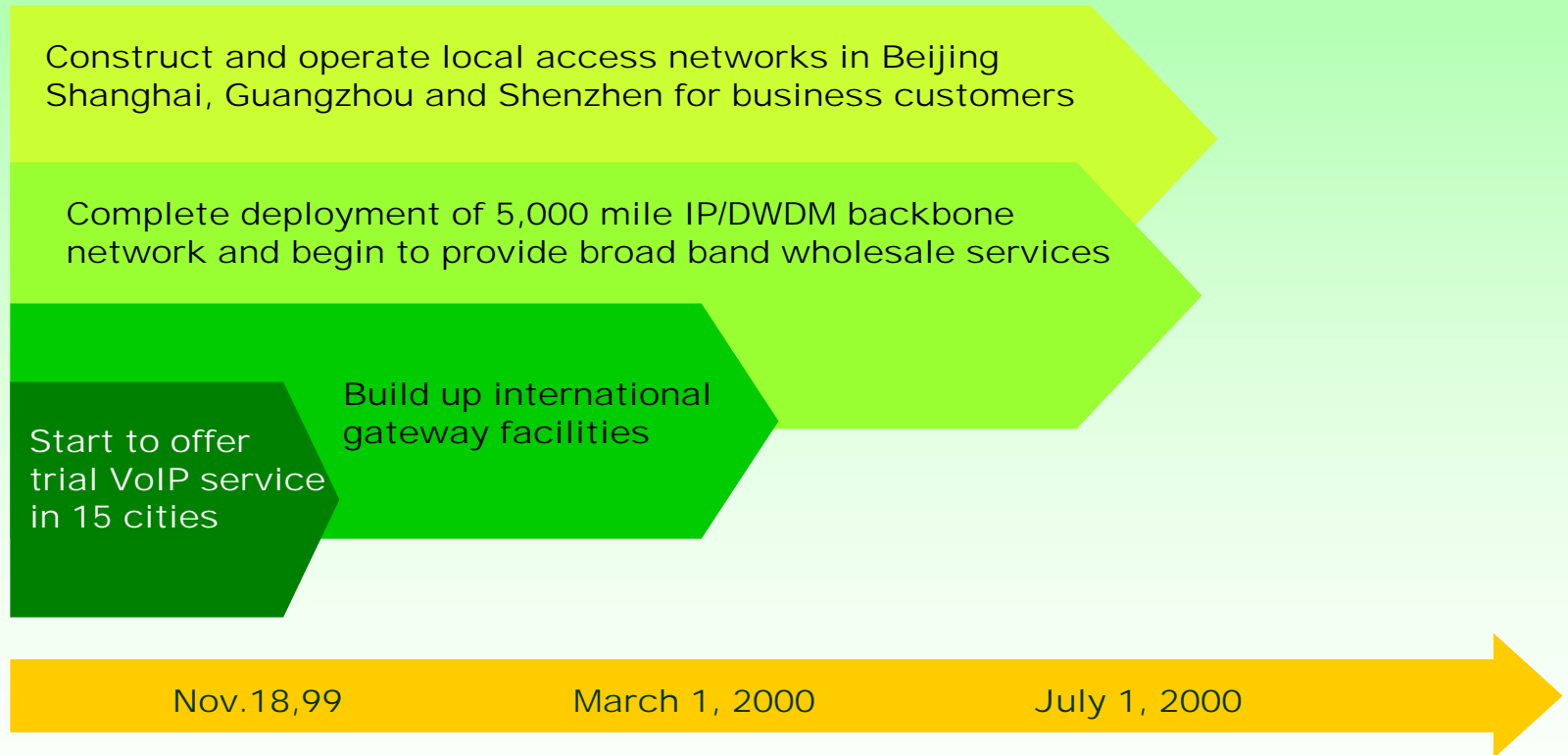
### ➤ Develop Brand Awareness

- Tailored services
- Targeted advertising and promotion

# CNCnet™ - A Broad Band Solution

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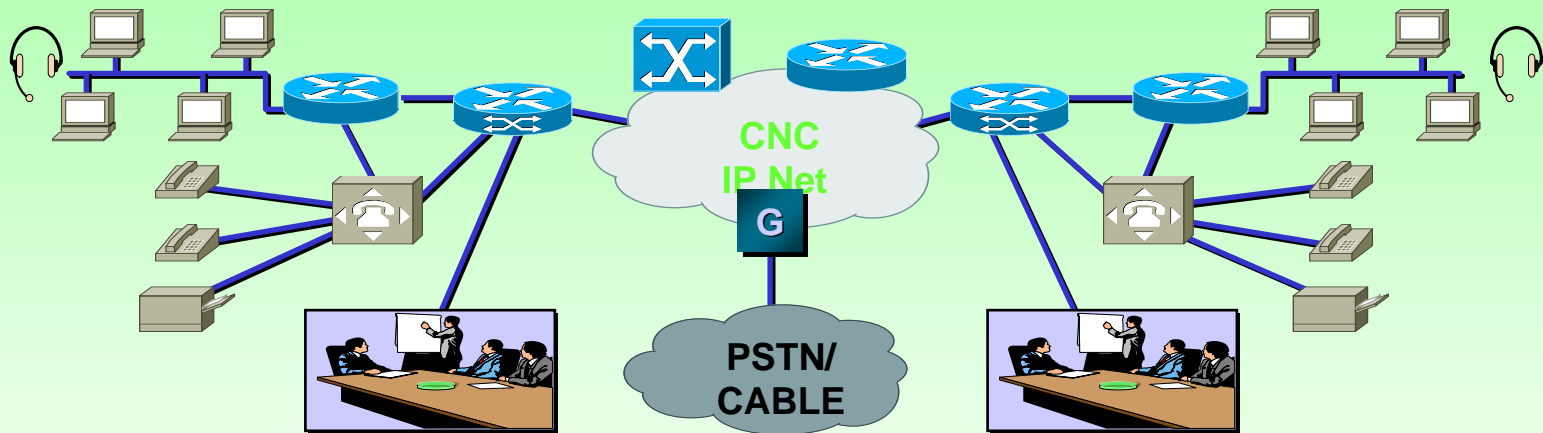
## Key Objectives of CNC in '99 - '00



# CNCnet™ - A Broad Band Solution

## Network Concept

An Open Telecom Network for an Opened China



Provision of maximum value with a converged IP infrastructure

- The least-cost routing enterprise WAN
- On-Net and Off-Net toll bypass and tandem switch offload
- Integrated full services communications backbone