# Regional Development Forum 2008
## "Bridging the Standardization Gap in Developing Countries"
### Brasilia, Brazil, 19-20 May 2008

# Overview by CITEL of the digital divide and strategies for its reduction

**Clovis Baptista,**

**Executive Secretary**

**Inter-American Telecommunication Commission**
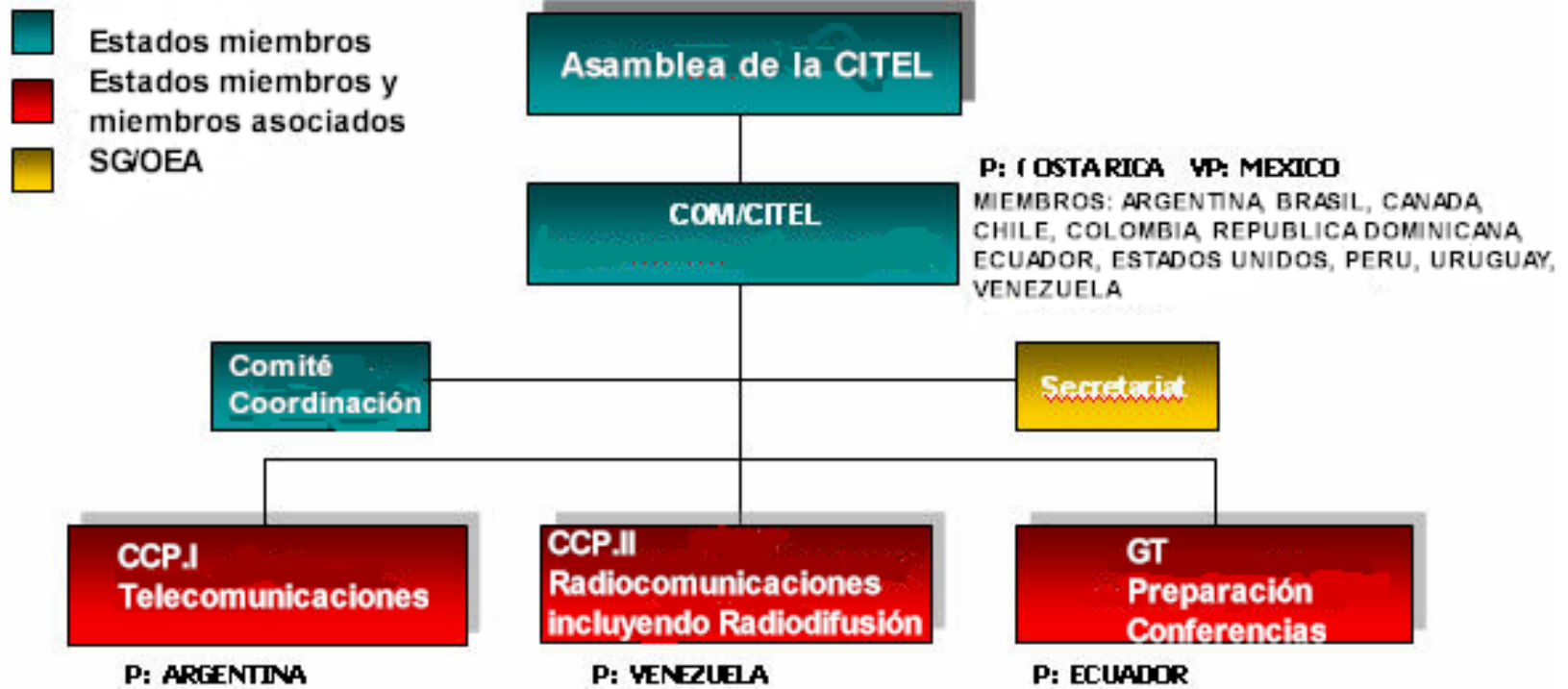
Brasilia, Brazil, 19-20 May 2008

# Outline

- Introduction to CITEL organization
- Digital Divide in the Americas
- CITEL priority issues
- What has been done regarding standards?
- Strategies to increase connectivity and telecommunication development
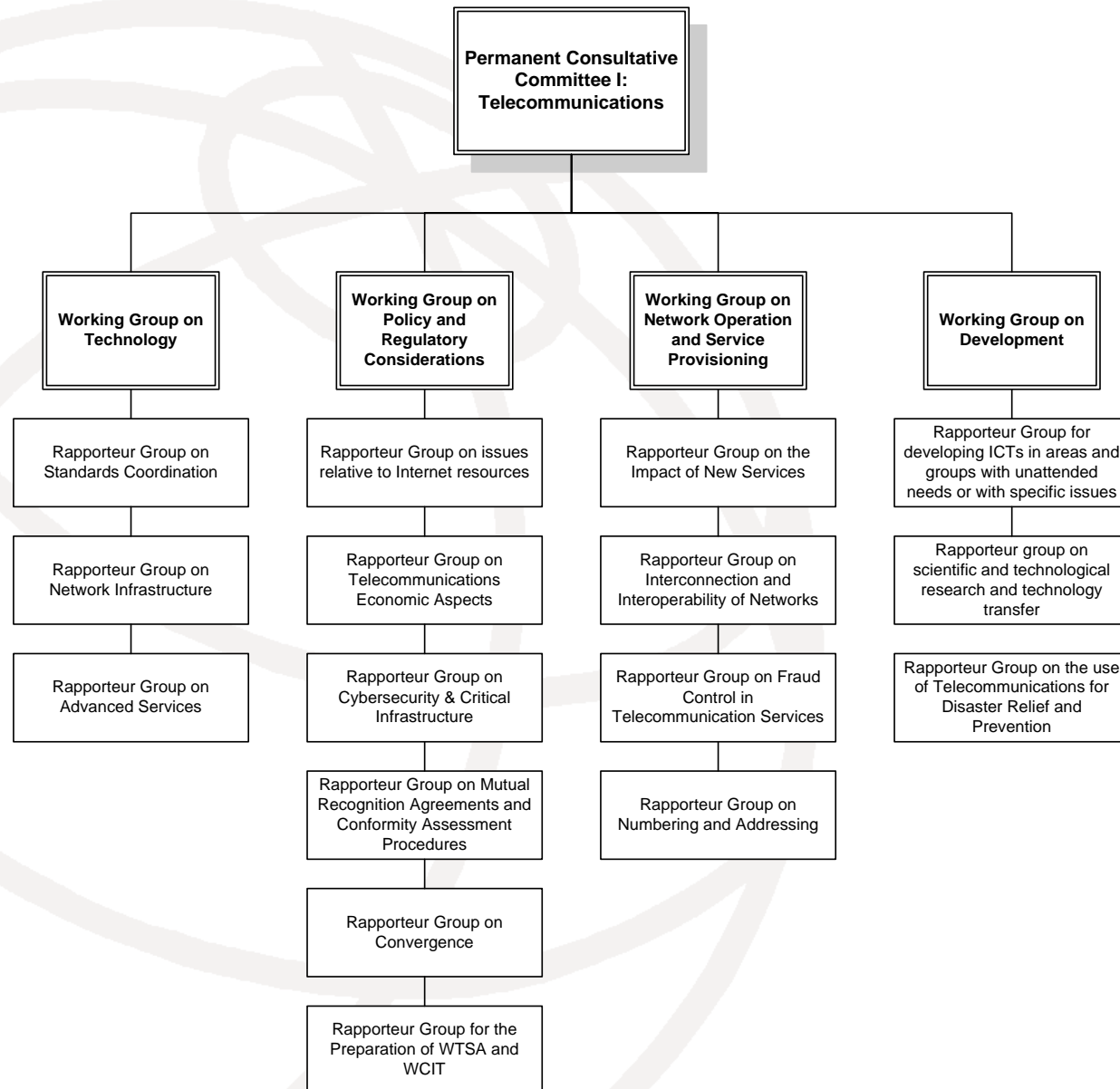- 2008 calendar

# What is CITEL?

- Advisory organization of the Organization of American States (OAS), specialized in telecommunications

- Principal forum in the Hemisphere where governments and the private sector meet to work together and to achieve common objectives in the telecommunication area

- Composed of the OAS Member States and Associate Members of each of the Permanent Consultative Committees of CITEL
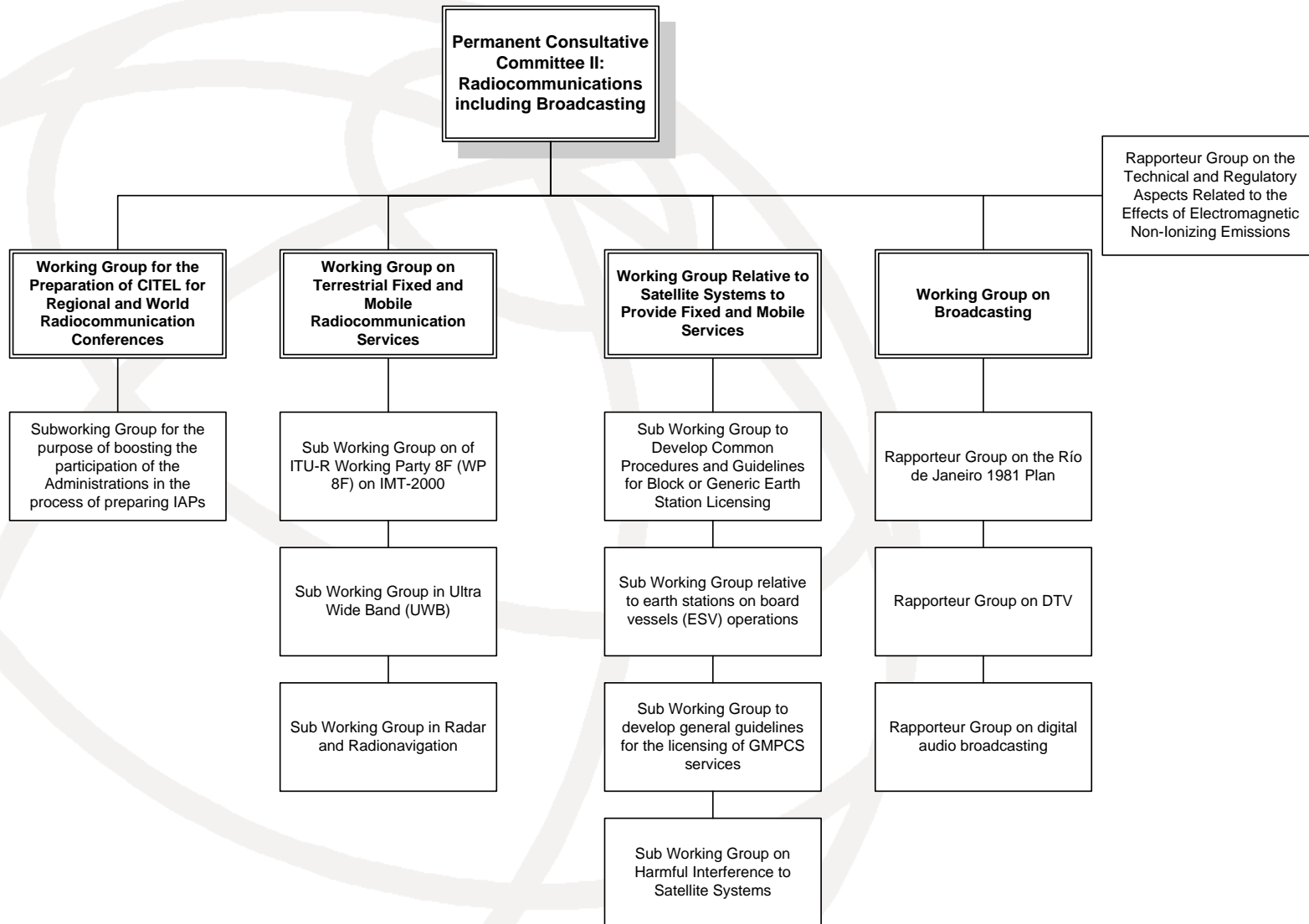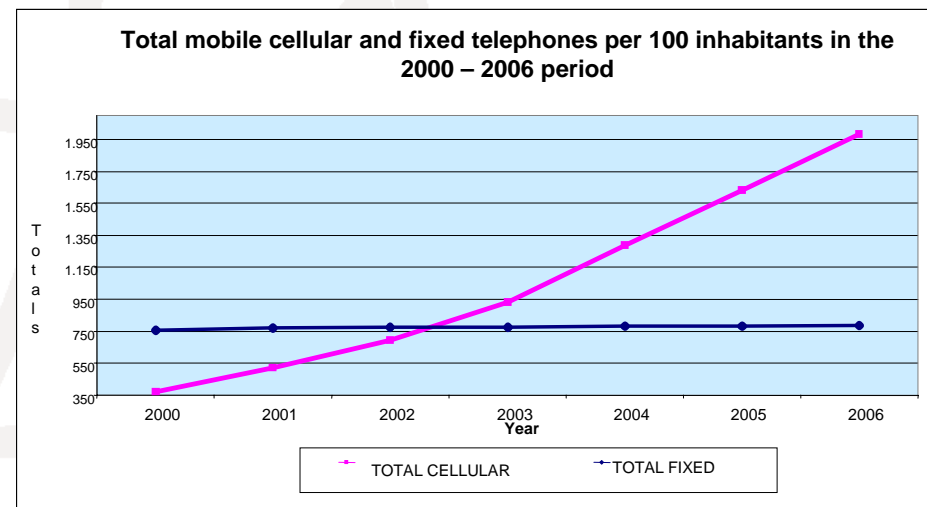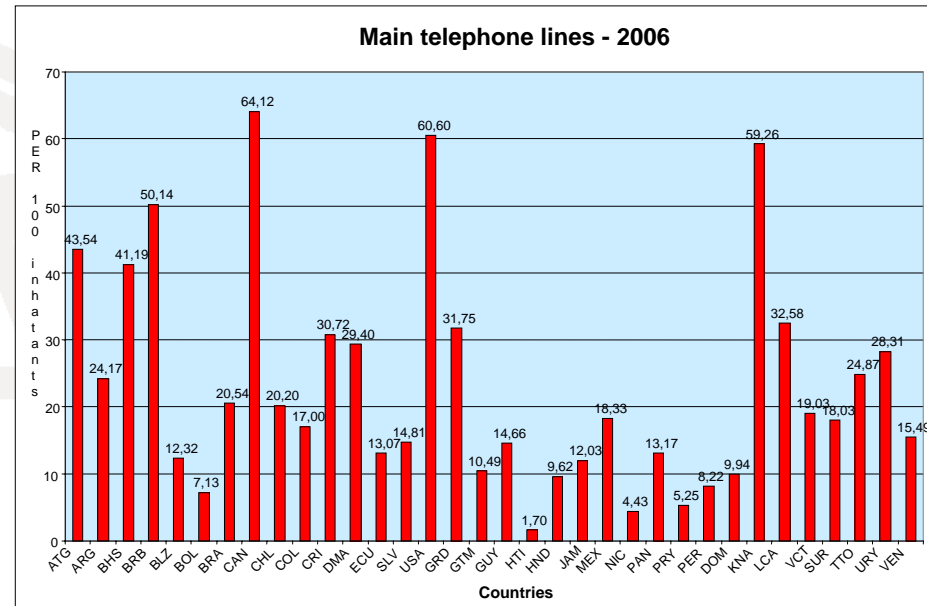
# CITEL Structure

# PCC.I structure

**Permanent Consultative Committee I: Telecommunications**

**Working Group on Technology**

Rapporteur Group on Standards Coordination

Rapporteur Group on Network Infrastructure

Rapporteur Group on Advanced Services

**Working Group on Policy and Regulatory Considerations**

Rapporteur Group on issues relative to Internet resources

Rapporteur Group on Telecommunications Economic Aspects

Rapporteur Group on Cybersecurity & Critical Infrastructure

Rapporteur Group on Mutual Recognition Agreements and Conformity Assessment Procedures

Rapporteur Group on Convergence

Rapporteur Group for the Preparation of WTSA and WCIT

**Working Group on Network Operation and Service Provisioning**

Rapporteur Group on the Impact of New Services

Rapporteur Group on Interconnection and Interoperability of Networks

Rapporteur Group on Fraud Control in Telecommunication Services

Rapporteur Group on Numbering and Addressing

**Working Group on Development**

Rapporteur Group for developing ICTs in areas and groups with unattended needs or with specific issues

Rapporteur group on scientific and technological research and technology transfer

Rapporteur Group on the use of Telecommunications for Disaster Relief and Prevention

# PCC.II structure

**Permanent Consultative Committee II: Radiocommunications including Broadcasting**

Rapporteur Group on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-Ionizing Emissions

**Working Group for the Preparation of CITEL for Regional and World Radiocommunication Conferences**

**Working Group on Terrestrial Fixed and Mobile Radiocommunication Services**

**Working Group Relative to Satellite Systems to Provide Fixed and Mobile Services**

**Working Group on Broadcasting**

Subworking Group for the purpose of boosting the participation of the Administrations in the process of preparing IAPs

Sub Working Group on of ITU-R Working Party 8F (WP 8F) on IMT-2000

Sub Working Group to Develop Common Procedures and Guidelines for Block or Generic Earth Station Licensing

Rapporteur Group on the Río de Janeiro 1981 Plan

Sub Working Group in Ultra Wide Band (UWB)

Sub Working Group relative to earth stations on board vessels (ESV) operations

Rapporteur Group on DTV

Sub Working Group in Radar and Radionavigation

Sub Working Group to develop general guidelines for the licensing of GMPCS services

Rapporteur Group on digital audio broadcasting

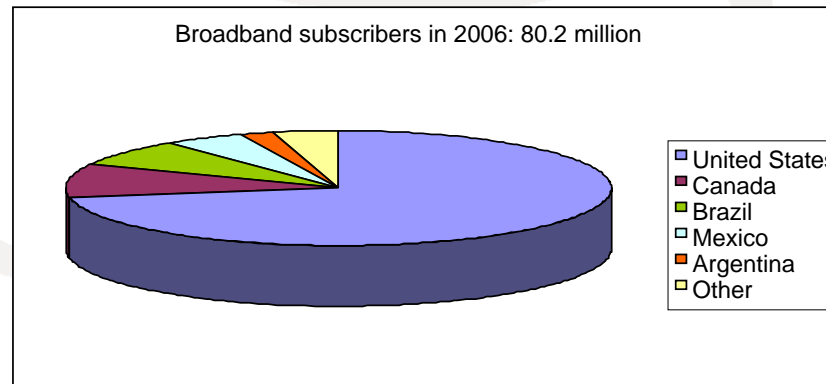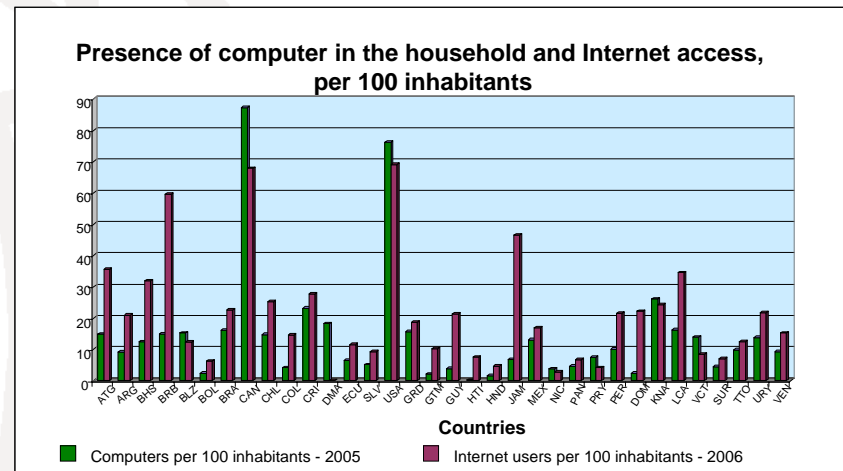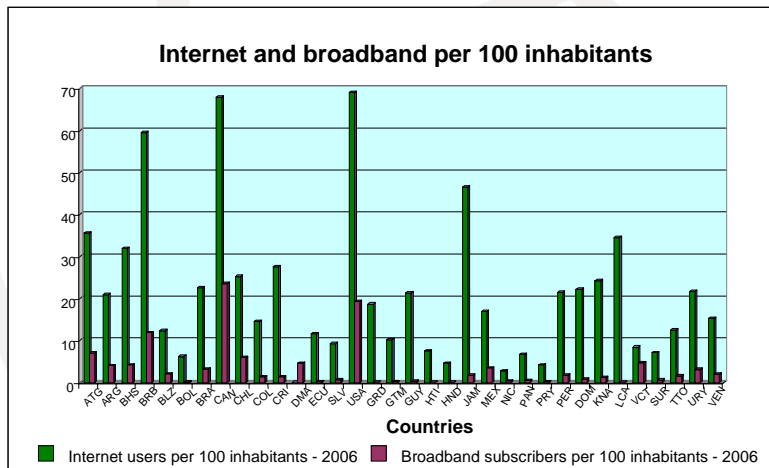Sub Working Group on Harmful Interference to Satellite Systems

# Digital divide in the Americas (1)

- Rate of fixed telephony penetration rose from 1995 to 2006 till 23%.

- In 2002, mobile exceeded fixed telephony in various countries of Latin America.



**Main telephone lines - 2006**



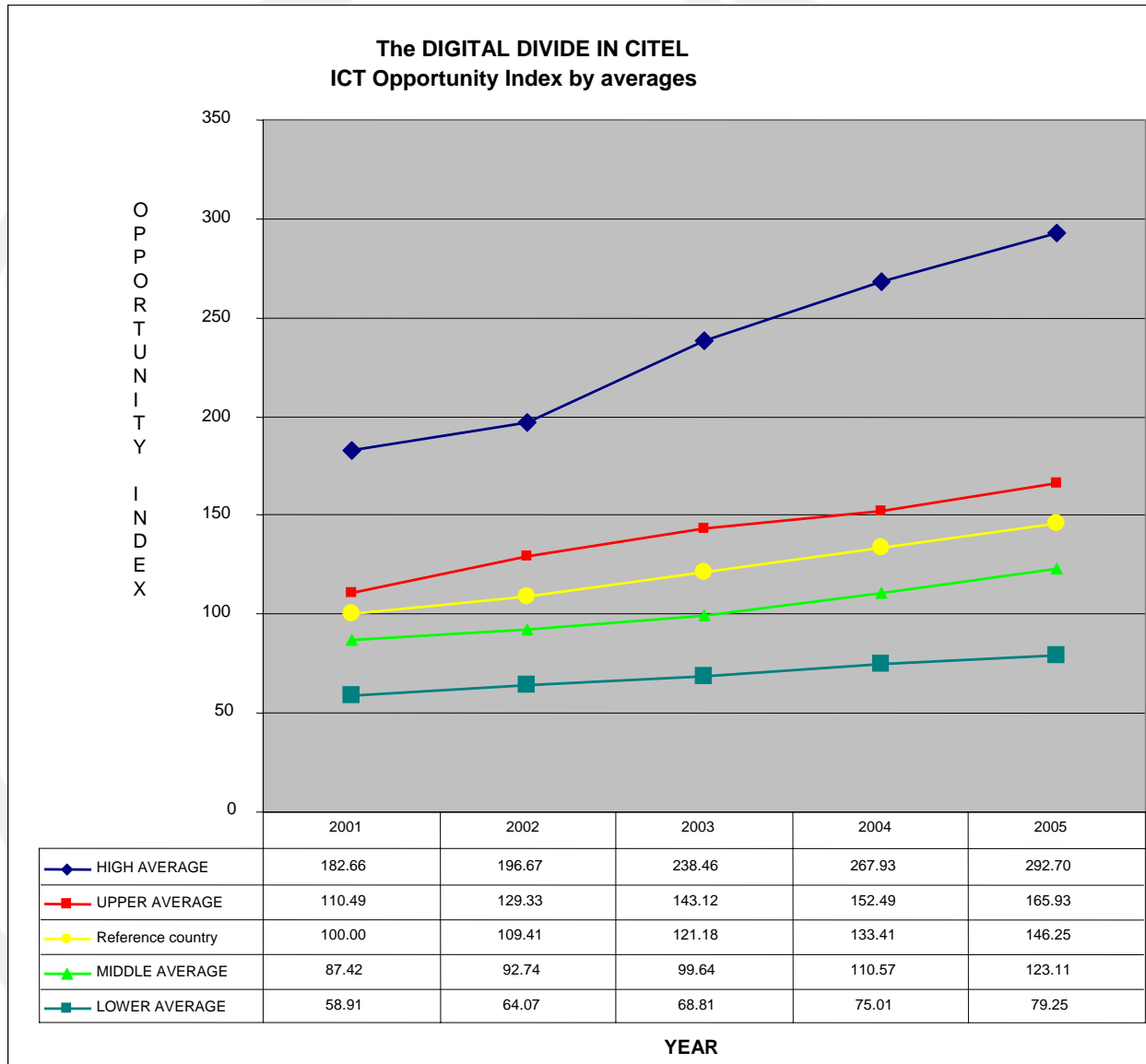**Total mobile cellular and fixed telephones per 100 inhabitants in the 2000 – 2006 period**

# Digital divide in the Americas (2)

- Great expansion of the Internet since the mid-1990s, achieving in 2006 penetration of nearly 23.4 % in Latin American countries

**Internet and broadband per 100 inhabitants**

Internet users per 100 inhabitants - 2006    Broadband subscribers per 100 inhabitants - 2006

**Presence of computer in the household and Internet access, per 100 inhabitants**

Computers per 100 inhabitants - 2005    Internet users per 100 inhabitants - 2006

**Broadband subscribers in 2006: 80.2 million**

- United States
- Canada
- Brazil
- Mexico
- Argentina
- Other

# The digital divide in the Americas (3)

**The DIGITAL DIVIDE IN CITEL**
**ICT Opportunity Index by averages**

OPPORTUNITY INDEX

| | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| HIGH AVERAGE | 182.66 | 196.67 | 238.46 | 267.93 | 292.70 |
| UPPER AVERAGE | 110.49 | 129.33 | 143.12 | 152.49 | 165.93 |
| Reference country | 100.00 | 109.41 | 121.18 | 133.41 | 146.25 |
| MIDDLE AVERAGE | 87.42 | 92.74 | 99.64 | 110.57 | 123.11 |
| LOWER AVERAGE | 58.91 | 64.07 | 68.81 | 75.01 | 79.25 |

**YEAR**

- The ICT Opportunity Index identifies the digital divide.

- Helps to understand how this gap has developed since the beginning of this century.

- Obtained on the basis of 10 indicators.

9

# What can be done to bridge the digital divide?

# CITEL priority topics

- Next generation network (NGN)

- IMS

- VoIP
- Number portability

- IPv6

- Universal service/access

- IPTV

- Intelligent Transportation Systems (ITS)

- RFID technology and sensor/monitoring networks

- Digital Broadcasting

- ICT applications
  - Telehealth
  - Cyber government
  - E-learning

- Cybersecurity

- Broadband access

- Spectrum harmonization

# What has been done in standards?

■ Standards coordination documents

■ Seminars and Workshops on priority issues

➡ Provides an overview of new technologies and its implementation such as NGN, roaming, VoIP, IPTV, cybersecurity and general regulation

➡ Promotes the participation of policy makers, regulators, manufacturers, operators and service providers.

■ Development of Technical Notebooks and Guidelines

# Strategies to increase connectivity and telecommunication development

- Guarantee universal accessibility to telecommunication services.

- Promote among the member states exchange of experiences about telecommunications policy and regulatory aspects.

- Study the development of next-generation services, especially supported by IP and their impact on the Region of the Americas.

- Examine the security aspects of communication, government, and nongovernmental networks.

- Modify education systems so that citizens can be effectively integrated into the Information Society (IS).

- Establish and decisively support programs to install telecenters, supported by the provision of useful applications.

- Increase efforts to have preparedness plans to effectively tackle emergencies caused by natural disasters.

- Monitor the progress of cybergovernment or digital government programs.

- Motivate the countries to introduce new technologies into the region in line with access and universal service, including the consideration of initiatives for bringing down the prices of computers.

13

# 2008 Calendar

| Meeting | Date |
|---|---|
| Joint CITEL/IDB (IIRSA) Workshop on International Roaming | 11 March 2008 (Washington, D.C., USA) |
| XII PCC.I | 12 - 14 March 2008 (Washington, D.C., USA) |
| Joint event between the ITU and CITEL to promote the association between the Member States and the private sector | 21 April 2008 – OAS headquarters (Washington, D.C., USA) |
| XI CCP.II | 22 - 25 April 2008 – OAS headquarters (Washington, DC, USA) |
| Meeting of the Rapporteur Group for the Preparation of the World Telecommunication Standardization Assembly (WTSA) | 23 May 2008 (Brasilia, Brazil) |
| XIII Steering Committee (STE) | 16 July 2008 |
| Workshops on fraud in telecommunication services by electronic means | To be confirmed |
| Sixth Workshop on fraud in telecommunication services | 5 August 2008 |
| XII PCC.II | 16 - 19 September 2008 |
| Meeting of the Rapporteur Group for the Preparation of WTSA | 21 - 30 October 2008 |
| XXII Working Group on the Preparation of ITU Council Meetings | 11 November and during the ITU Council |
| XX COM/CITEL | 2 - 4 December 2008 (San José, Costa Rica) |
| XXIII Working Group on the Preparation of ITU Council Meetings | 2 - 4 December 2008 (San José, Costa Rica) |
| XV Meeting of the Conference Preparatory Group | 2 - 4 December 2008 (San José, Costa Rica) |

# Conclusion

■ All governments, to some extent, have included in the framework of their development policies on the aspects listed before. However, current efforts are not enough to immediately meet existing needs so as to guarantee the region's development and its integration into the globalized world of Information Society, without the lags, if any, that might prevent it from benefiting from the opportunities that are now emerging.

■ Collaboration is fundamental to avoid duplication of efforts and incompatible implementations.

# Thank you very much for your attention

**Clovis Baptista**

**Executive Secretary of CITEL**

**E-mail: cbaptista@oas.org**