

# NGN and Broadband

## policy and regulatory issues

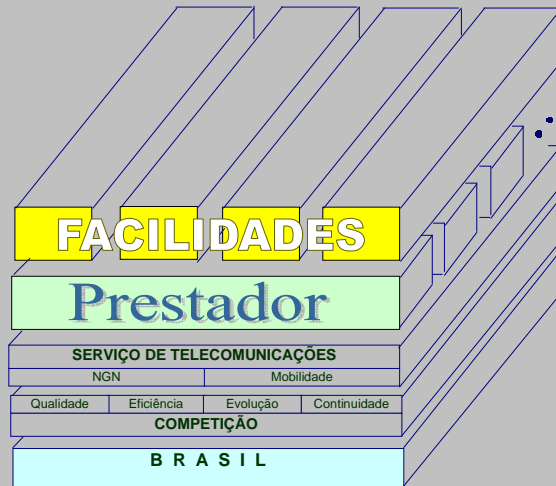
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1. introduction
2. developing country social objectives
3. future of telecom business model (NGN and broadband)
4. issues related to the demand's growth
5. issues related to the offer's growth
6. regulatory issues
7. investments
8. governance

- with the privatization of the telecom's companies, during the 90's, the telecommunications sector has changed to a zone of multiple actors.
- administrations (regulators), operators / vendors (private sector) and organized civil society have, each one, an important role in the definitions for the future of telecommunications.
- based mainly in technological neutrality, most of the regulators are dealing with many issues in order to define new converged services, trying to reach the Users' necessities and to stimulate local markets and development.
- nevertheless, technology is the engine of this convergence...
- NGN and the growth of broadband infrastructure are pushing this transformation, creating new scenarios, forcing the government and the standardization organizations to respond in a way never seen before.
- the goal of this presentation is show the point of view from a developing country regulator, to share some experiences and give some ideas to be discussed



- accelerate people's access to the modern Information Society
- increase government's applications and facilitate their use
- contribute to network evolution (all IP networks; NGN)
- contribute to industrial and technological development
- increase local industries capacities on ICT's Sector
- increase employment levels
- increase GIP (Gross Internal Product)
- implement the goals of the WSIS (World Summit on the Information Society):
  - connect all localities, all teach institutions, all scientific research institutions, all museums and public libraries, all hospitals and health centers, and all government related institutions

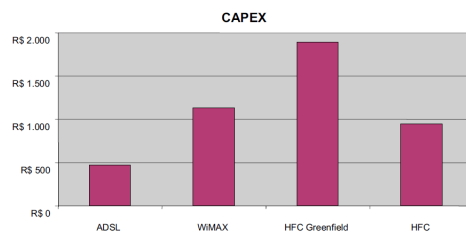
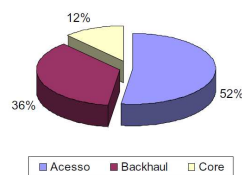


- number of residences with Internet access
- number of Internet accesses
- broadband penetration
- broadband service characteristics: low speed, band limitation, operational problems
- broadband prices
- educational level
- ICT's capacities and skills

- broadband coverage
- competition, in order to stimulate:
  - new offers
  - lower prices
  - infrastructure sharing
  - efficiency
- spectrum allocation
  - 2,5 GHz, 3,5 GHz, 450 MHz, 700 MHz
- investments on network expansion and renovation
- investments on transport networks

- needs to implement:
  - new instruments to increase competition
    - number portability
    - local loop and mobile networks unbundling
    - cost models
  - new numbering forms
- emphasis on mechanisms to stimulate infrastructure sharing
- services reorganization (one license)
- try to balance strong and light regulation
- taxes

- investments based on government and private sector
- government:
  - taxes reduction (?)
  - special funds (?)
  - existing funds (?)
- different CAPEX for different technologies
  - ADSL
  - WiMax
  - HFC (hybrid fibre-coaxial)



- a plan to develop the telecom sector, considering the information presented, should take into account the governance model in order to achieve the main proposes...
- coordination between:
  - all public initiatives (federal, states and municipalities)
  - public-private cooperation
- Issues
  - clear definition of the objectives
  - division in projects
  - enforcement
  - centralized or decentralized control?
  - attention on the resources (investments fonts)