Coexistence of traditional and IP interconnection:
implications for traditional interconnection regulatory frameworks
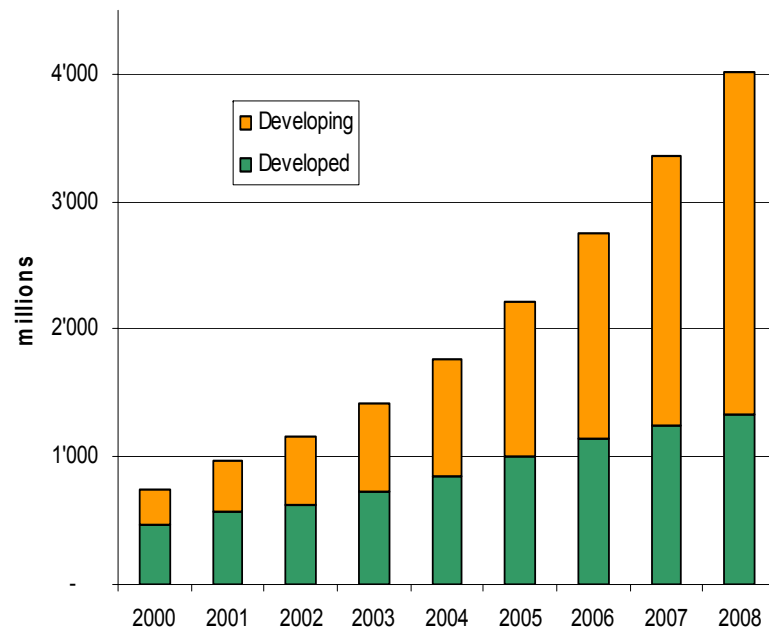
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Discussion Paper

Is it the right time for discussion for the developing countries?

Expansion of Mobile networks

Mobile cellular subscriptions, 2000-2008

Source: ITU

- ➢ Mobile markets are growing:
  - in Vietnam number of mobile subscribers in 2Q 2009 grew **86 proc.** comparing to 2Q 2008;
  - in Indonesia – **46 proc.**;
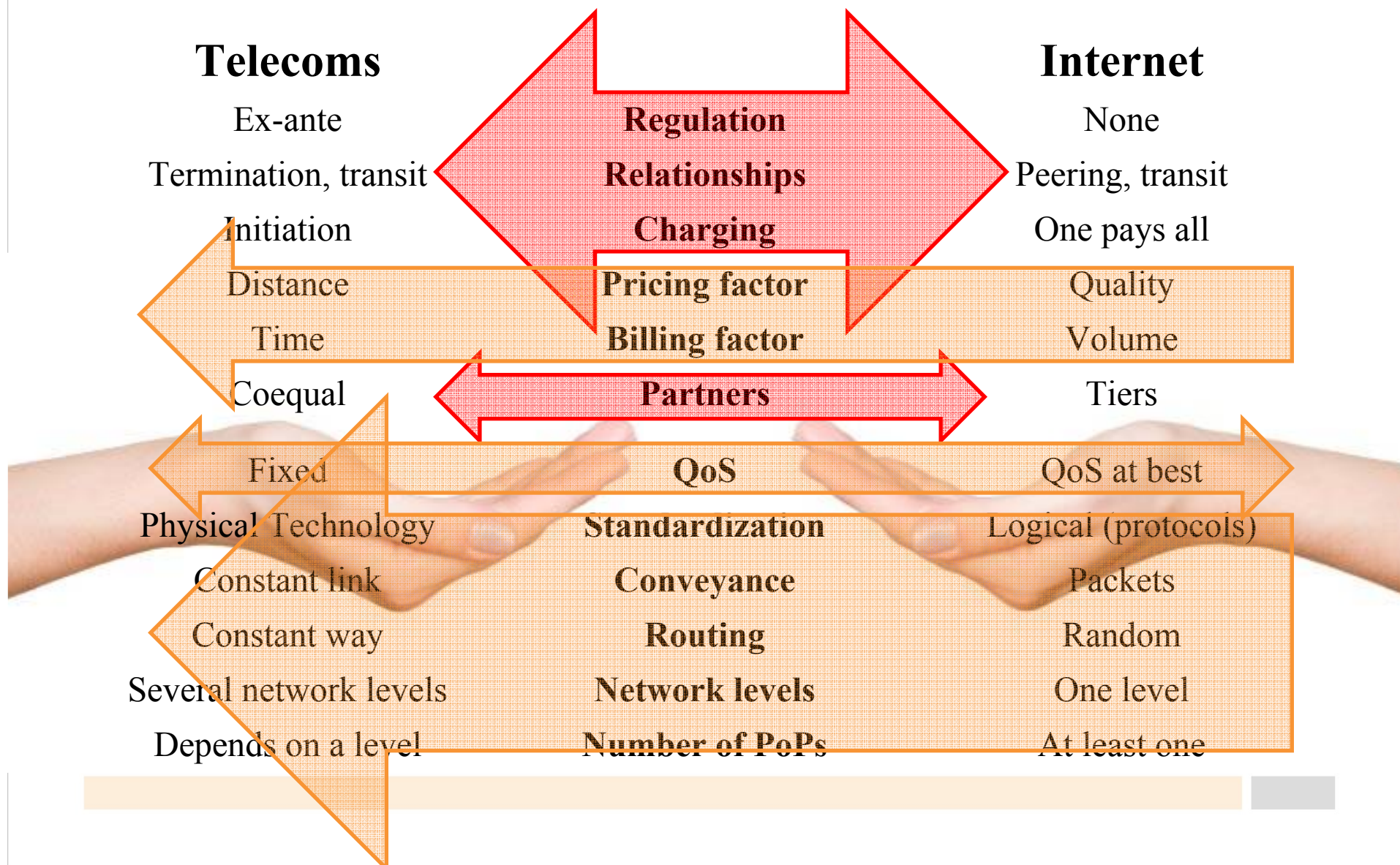 - in India – **52 proc.**

- ➢ Changes in the market of network equipment:
  - Costs of network equipment decreased;
  - Innovative solutions allow to reduce the power consumption and volume of equipment needed.

What does the migration towards IP-based networks mean?

1. Migration from **service-oriented networks towards multi-service networks**:

   – "one network – one service" -> "one network – many services":

2. **More networks** are able to deliver the similar value to the consumer:

   – more competitive environment between multi-service networks;

3. IP-based **networks are not the same** (i.e. different network architectures exist), **but they can do the same**;

4. It also means more interconnection between different networks and **coexistence of different interconnection approaches**.

Coexistence of two interconnection approaches

Telecoms		Internet
Ex-ante	**Regulation**	None
Termination, transit	**Relationships**	Peering, transit
Initiation	**Charging**	One pays all
Distance	**Pricing factor**	Quality
Time	**Billing factor**	Volume
Coequal	**Partners**	Tiers
Fixed	**QoS**	QoS at best
Physical Technology	**Standardization**	Logical (protocols)
Constant link	**Conveyance**	Packets
Constant way	**Routing**	Random
Several network levels	**Network levels**	One level
Depends on a level	**Number of PoPs**	At least one

Interconnection regulatory environment

Telecom

Internet

International level

Active cooperation among regulatory community

Debate around International Internet Connectivity regulation

Ex-ante regulation

Do regulators have enough authority to solve interconnection disputes between ISPs?

National level

Should we continue, expand or withdraw interconnection regulation?

Should we consider 'hands off' approach?

- ➢ Internet interconnection:
    - interconnection exchange model;
    - direction of traffic may be not important;
    - hard business rules: not all ISPs are equal;
    - no costs sharing mechanisms, lack of transparency.
- ➢ International telco interconnection:
    - multilateral agreements;
    - already adopted to deliver all types of IP traffic;
    - implemented through the Internet or via dedicated interconnection platforms;
    - lack of transparency.

Not really … But we should make the most of the positive experience and ensure regulatory goals are achieved!

What could we do?

➤ **More symmetric interconnection regulation**: in order to ensure interconnection where it is feasible and needed;

➤ **Extended transparency obligation**: because it lowers bargaining costs and works as a market self regulation tool;

➤ **Reliable and Robust interconnection**: because the consequences of a disruption or interruption in interconnection functions could be serious;

➤ **QoS**: because it could enable new forms of discrimination between incumbent's services and those provided by interconnecting competitors;

➤ **Open forum for the discussions**: to discuss migration issues and to have a place to raise any other relevant question.

As our ultimate goals are to ensure that:

➢ Networks deliver the maximum benefit to the consumers;

➢ New operators enter the market without unnecessary burden;

➢ Existing operators maintain and expand their interconnectivity.

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