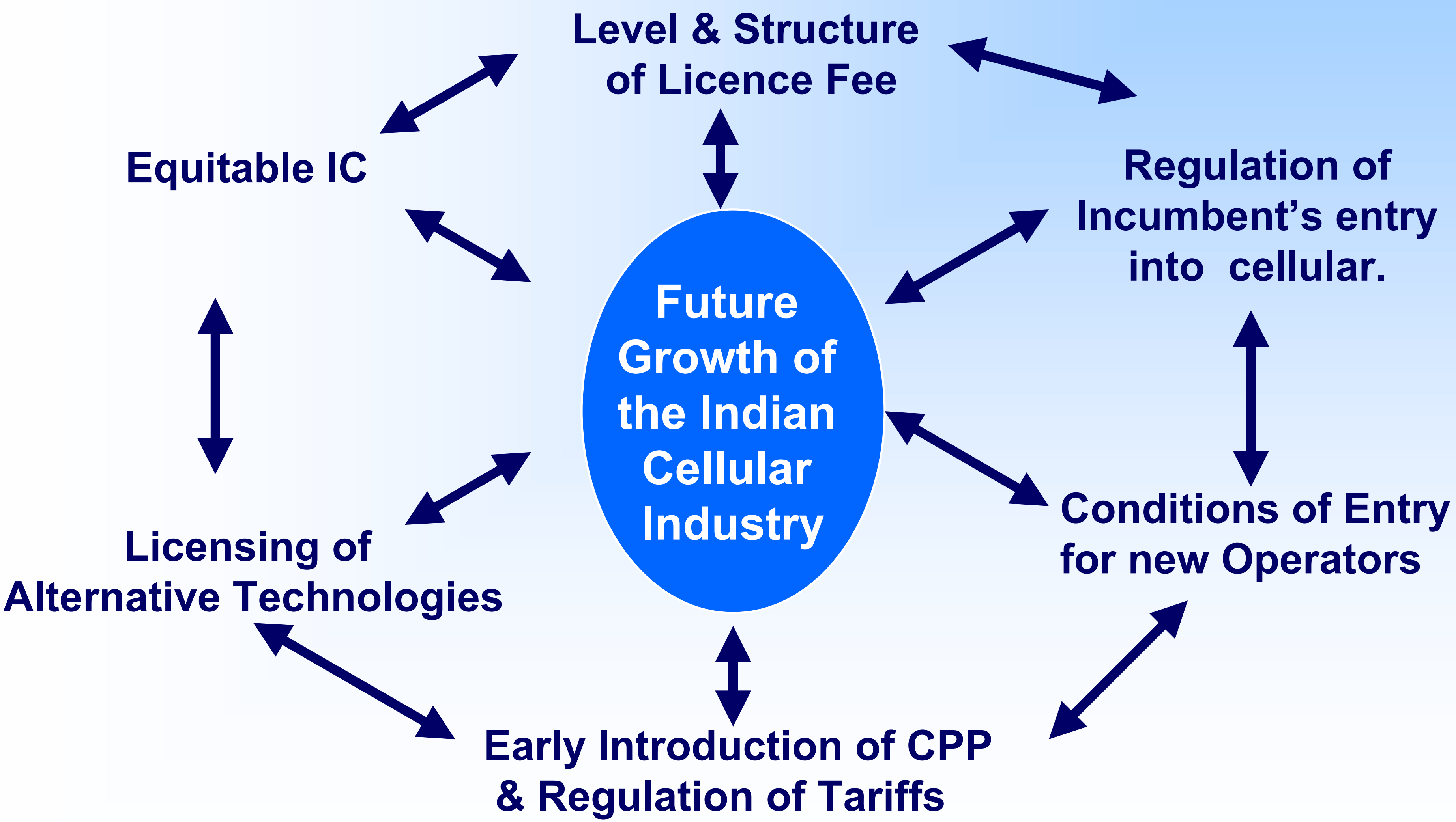
Equitable Interconnection
&
Introduction of CPP

Presentation to TRAI

April 18, 2000, Mumbai

Growth of Cellular - Key Factors



Critical & Immediate Concerns

- A Fair & Equitable Interconnection Regime & Non-Discriminatory Access Charges.

Importance of Interconnection

"A fair & equitable interconnect regime is the bedrock of a multi operator telecommunications section. Interconnection between two networks is therefore the most critical regulatory issue in the Telecommunications Sector."

…….. TRAI, Press Release of September 2, 1999

It has been internationally recognized that interconnection is the single largest cost for new operators and may account for as much as 40% of the total costs to the operator.

International Principles in IC

- Interconnection must be :
  - Non-discriminatory
  - Transparent
  - Objective
  - Cost-based
  - Unbundled
- Specific obligations for dominant operators.
- Recourse to the Regulator to resolve disputes on IC.

International Survey of IC Policies

- 19 countries from Europe, America, & Asia-Pacific.

POIs

- IC at all local switches & at any level of switching hierarchy and / or at every technically feasible point of interconnect.

……... Australia, Canada, France, Germany, Korea, Netherlands, Uganda, USA, Venezuela

- Service Providers negotiate POIs.

……… Australia, Czech Republic, Denmark, Finland, Nepal, Netherlands, Switzerland, UK.

Interconnect Prices

- Almost all countries offer cost based IC.
- Only exception is Uganda, where pending the finalization of cost based IC, the incumbent receives a %age of the retail cost for terminating / transiting calls.

History of IC

- The cellular operators have been discussions with DTS/MTNL for almost 4 years without any conclusive results.
- This resulted in :
  - Delays in network roll-outs.
  - Higher cost of service to the consumers.
  - Loss of revenues to the tune of Rs. 500 crores
- Even as recently as March 2000, the cellular operators made another attempt to resolve the matter bilaterally and come to an amicable settlement. But there has been no response to our requests.

The Discrimination

A non-level playing field vis-à-vis MTNL

- MTNL pays only 22.5% of its revenues to DOT as against a far higher payment by the cellular operators.
- MTNL who is not a long distance operator, derives huge benefits by collecting STD revenues from cellular operators and retaining Rs. 0.93 out of every Rs. 1.20 collected, passing on only Rs. 0.27 to the DTS.

and even Private Basic Operators

- Basic operators pay an access charge of 40% for national long distance calls, 55% for international calls and absolutely nothing for local calls as opposed to a 100% pass thru by cellular operators who also bear the brunt of bad debts from their subscribers.

Even PCO operators (MTNL /DoT) get bulk discounts

… and the Inconsistencies

- Cellular operators pay fixed operators for call termination, but not vice versa. There is no reciprocity.

- A fixed customer pays the same amount for a call to a mobile customer that he would pay if DTS/MTNL carried the call from end to end. There is no premium on Location

The Enormity of the Threat

- DTS / MTNL are on the verge of launching their cellular services under seriously discriminatory terms & conditions.
- Potential Threats
  - Cut throat outgoing call charges.
  - Free incoming calls.
  - No Interconnection costs.
  - Cross-subsidization from fixed line monopoly profits.
  - Cross-subsidization from profits earned from cellular long distance revenues to the tune of around 7.5 - 8 crores per month from the 4 cellular operators in Delhi & Mumbai.
  - Cross-subsidization through infrastructure facilities available with the fixed line network.

Need of the Hour

TRAI should urgently :

- Issue guidelines on fundamental principles of IC.
- Pending the finalization of cost based access charges, direct DTS / MTNL accept the same access charges from cellular operators that are applicable to basic operators.
- Ensure POIs are granted at desired locations, subject of course to technical feasibility and irrespective of switching hierarchy.

TRAI is now fully empowered to fix the terms of interconnectivity between service providers.

Critical & Immediate Concerns

- Early Introduction of CPP Regime

The Need for CPP

- CPP system necessary for growth of cellular as MPP inhibits growth.

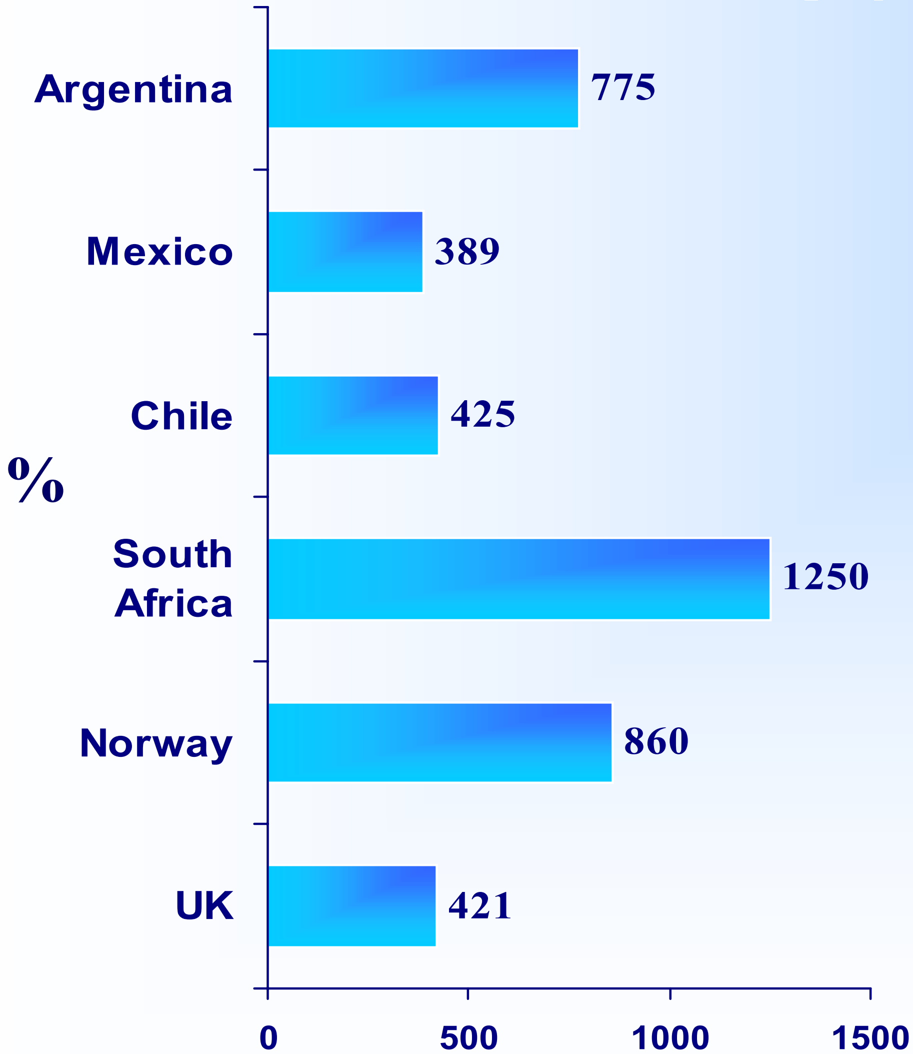
- ‘It would be wrong to conclude that in the longer term the same market penetration could be achieved with wireless party pays as with calling party pays. In the medium to long term the full potential of wireless mobile telephony can only be realized with CPP tariffing.’

Consumer acceptance of CPP and
Effect on Wireless Market Growth.
Prodata Partners

Global Experiences of CPP

- **Argentina**
  - A 233% growth in subscriber numbers in the first year.
- **Chile**
  - A 175% growth in subscriber numbers within the first year.
  - Cellular penetration at 15%.
- **Venezuela**
  - Cellular subscribers grew at almost 31 times the growth of fixed line subscribers within the first two years of CPP being introduced.
  - Cellular penetration at 8%.
- **Finland**
  - With CPP, Finland has a cellular penetration level of 65%.

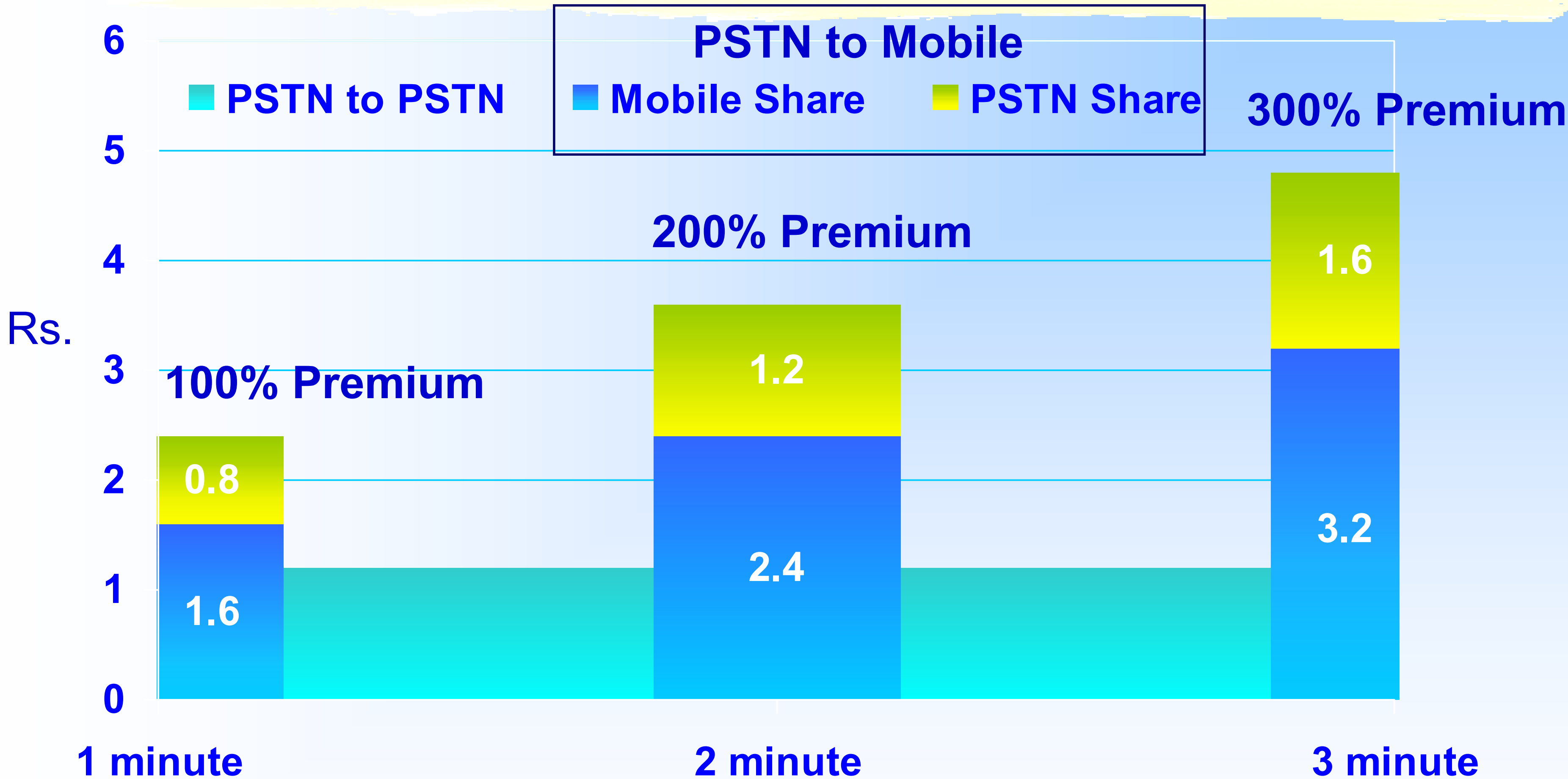
Premium on P/M Calls vs. P/P Calls



There is usually a premium on PSTN/Mobile calls as compared to PSTN/PSTN calls as the consumer pays a premium for contacting a person and not a 'location'.

Internationally, the premium on PSTN to Mobile Calls is at least 4 times the price of a local PSTN to PSTN call and going up to as much as 12 times in the case of South Africa.

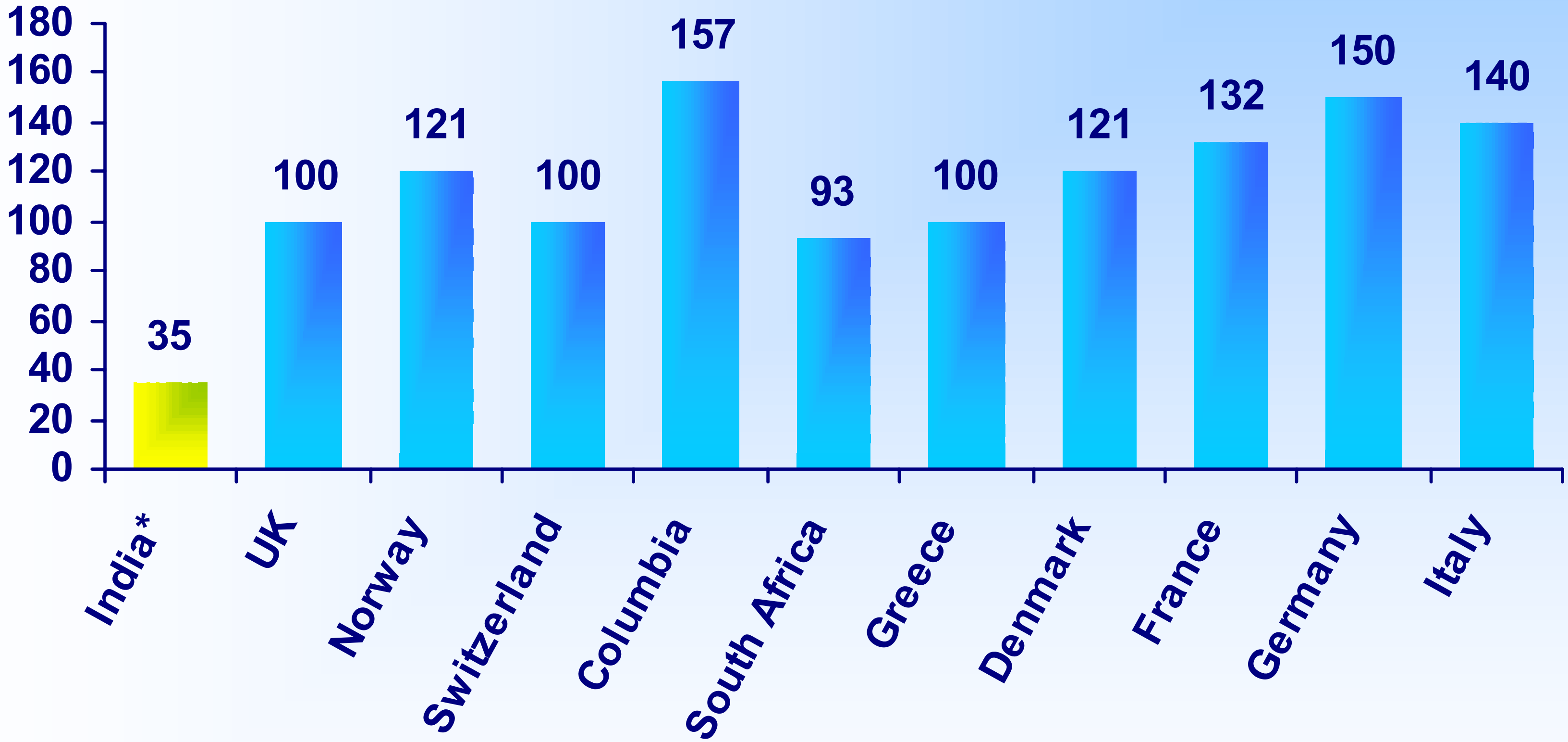
Premium on P/M vs. M/P Calls-India



Premium on PSTN/Mobile calls as well as share of mobile finalized by TRAI is much lower than international benchmarks.

TRAI Proposals of November 1, 1999

P/M charges as a % of M/P charges

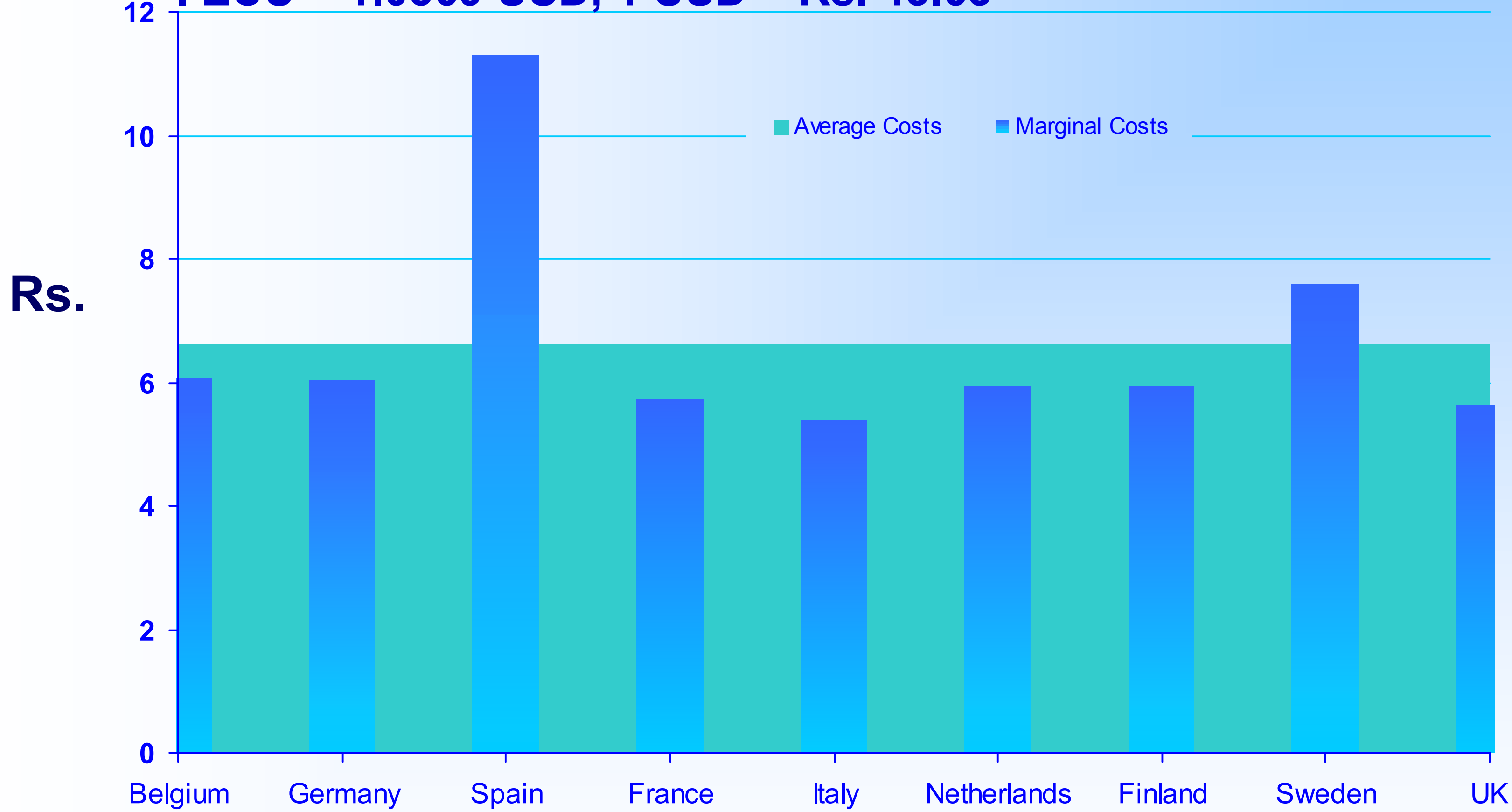


Internationally PSTN to Mobile charges are at least equal or higher than Mobile to PSTN charges. This prevents call back and hence skewed traffic flow.

Marginal Costs of Call Termination

Fixed-Mobile

I ECU = 1.0369 USD, 1 USD = Rs. 43.63



Indian Operators use the same equipment, to which is also added the cost of customs duty.

The History of CPP

- TRAI first proposed CPP in its Second Consultative Paper 98/3 on telecom pricing.
- The industry too believes that CPP is in the interests of the long term growth of the industry.
- CPP proposals were Reviewed, ……..Revised, ...Lowered;
- CPP was announced, ……..Contested …… and quashed.

Introduction of CPP is vital to the future & growth of the cellular industry.

CPP - A Win Win Situation

Introduction of CPP will lead to :

Affordable Services

+

Increased Usage

+

Higher Penetration Levels

+

Better Utilization of Networks

+

Higher revenues for :

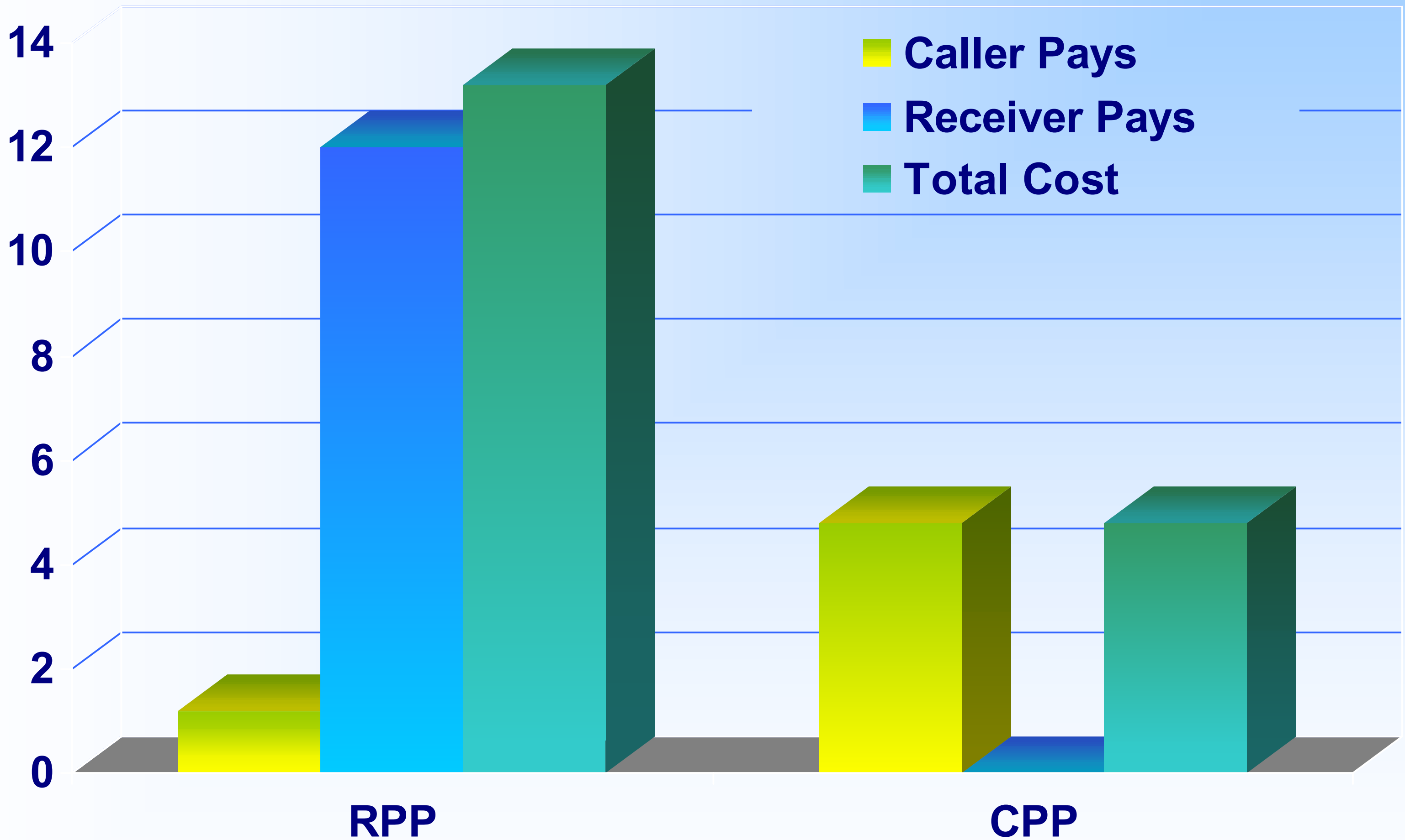
- Cellular Operators
- Fixed Line Operators
- Government

It is expected that the introduction of CPP will lead to at least a 100% increase in the MOUs

CPP is NOT Anti-Consumer

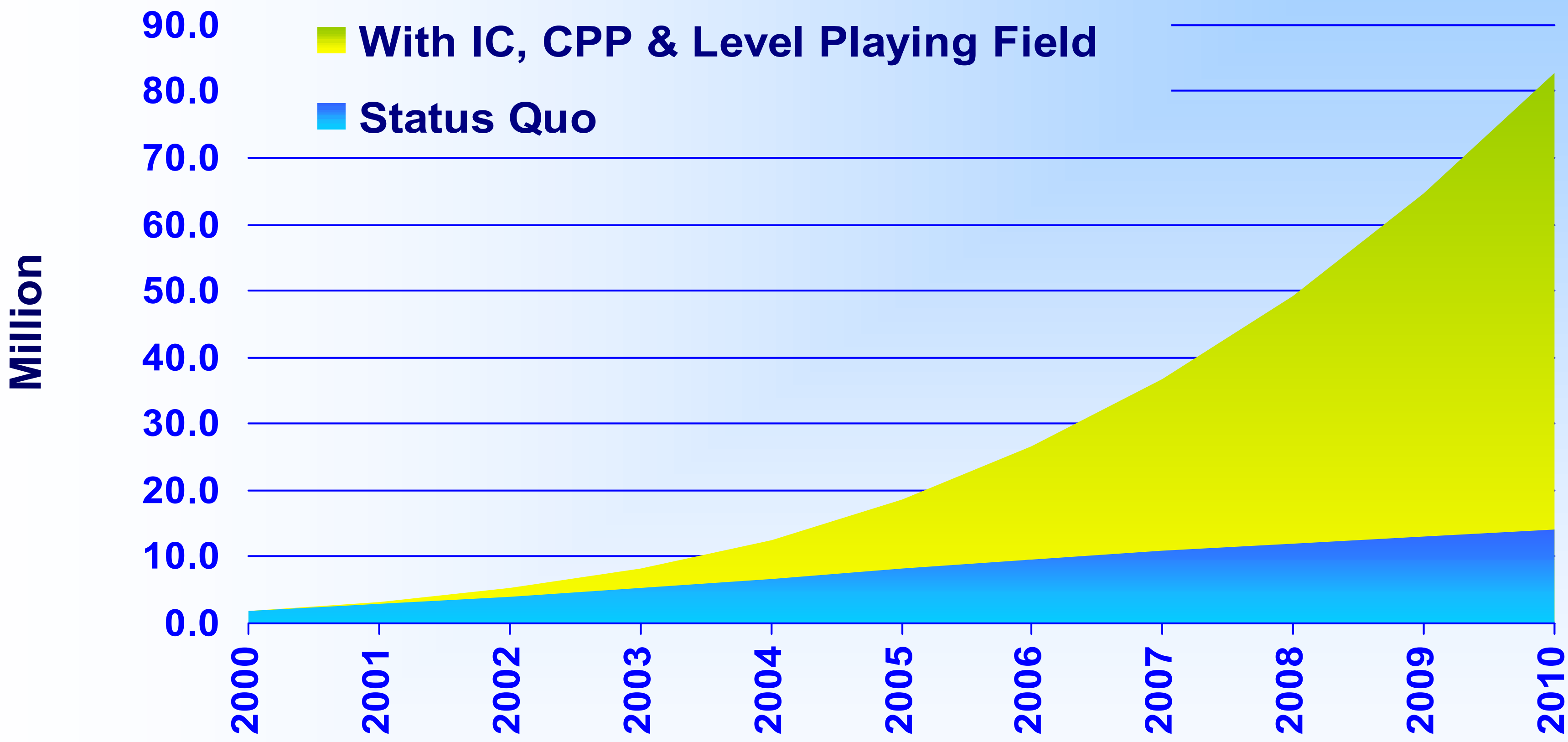
- Contrary to public perception, CPP is NOT anti-consumer.
- In the case of business calls, it is unfair to charge the receiver to pay the incoming call charges. All this does is encourage the use of the mobile as the pager as the cellular customer is wary of both giving out his number or receiving calls.
- In the case of personal calls, it must be remembered that there is a strong community of interest. The people who are calling you are your friends and relatives.
- What is important to remember is the total cost of the call - and this comes down drastically on the introduction of CPP.

Total Cost of a 3 Minute Call



Total call costs come down by 64%under CPP.

Projected Subscriber Growth



Vital Regulatory support on key issues can really lead to an explosive growth in the cellular industry.

Thank You