Towards a new telecoms regulatory framework for Europe

Luis Enriquez
Lisbon, November 5, 2002
McKinsey & Company, Inc
KEY MESSAGES

• Liberalization of telecommunications markets has generated huge medium term benefits to consumers but at significant cost to industry profitability in the fixed sector.

• The regulatory debate is far from over: new EU regulation calls for a change in the regulatory frameworks of all Member States over the next year. The impact on the industry could be huge.

• As countries implement the new EU directives, Portugal must carefully evaluate both the short term and long term impact of regulation on the industry.
EUROPEAN TELECOM MARKETS HAVE BEEN LIBERALISED OVER THE LAST 4-6 YEARS

1996 - 1997

- Creation of a regulatory framework for the liberalisation of the telecom sector
- Adoption of a series of EU directives to achieve the liberalisation of the telecoms industry
  - Access (open network-provision)
  - Universal service
  - Interconnection
  - Licensing
  - Data protection

1998 - 2001

- Transposition of the European regulatory framework to the Member States
- Gradual implementation of the new framework in the Member States:
  - Before/in 1998: Holland, Finland, Sweden and UK*
  - 1998/1999: Germany, Spain, Denmark, France, Belgium, Austria and Norway
  - 2000: Portugal and Greece

Content

Effects on telecom markets

- Abolition of privileges and exclusive rights of wireline incumbent operators
- Entry of new wireline and wireless operators

* UK started the liberalisation movement in 1984

Source: EU Legislation
REGULATORY FOCUS HAS BEEN VERY DIFFERENT IN WIRELINE AND WIRELESS

In wireline, asymmetric regulation aimed at facilitating market entry of new competitors...

- Opening of essential incumbent’s network elements to competitors
- Cost oriented interconnection obligations for incumbent operators
- Definition of Universal Service obligations and establishment of financing methods
- Pricing obligations to incumbent operators (price-cap, price controls, limited commercial flexibility, etc…)
- Flexible licensing process

...in wireless, less intrusive regulatory intervention to foster the sector’s development and growth

- Non-regulated access
- Loosely regulated interconnection prices
- Progressive entry of new operators with each technology cycle
- Freedom for each Member State to establish procedures for spectrum licensing (auction, beauty contest)
- No retail price regulation

Source: EU Legislation
EUROPEAN CONSUMERS HAVE BENEFITED FROM GREATER CHOICE …

Number of operators. 2001

- **Holland**
  - 5 Mobile Op.*

- **Sweden**
  - 3+1 Mobile Op.*

- **United Kingdom**
  - 4+1 Mobile Op.*

- **France**
  - 3+1 Mobile Op.*

- **Germany**
  - 3+3 Mobile Op*.

- **Spain**
  - 3+1 Mobile Op.*

- **Portugal**
  - 13 Fixed Op**.
  - 3+1 Mobile Op.*

- **Switzerland**
  - 3+1 Mobile Op.*

- **Italy**
  - 3+2 Mobile Op.*

* 2G + 3G operators
** Currently 10 operators

Source: Analysis
...SIGNIFICANT PRICE DECLINES...


<table>
<thead>
<tr>
<th>Country</th>
<th>Long Distance***</th>
<th>International</th>
<th>Wireless**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>-70</td>
<td>-71</td>
<td>-30</td>
</tr>
<tr>
<td>Italy</td>
<td>-49</td>
<td>-30</td>
<td>-24</td>
</tr>
<tr>
<td>France</td>
<td>-60</td>
<td>-48</td>
<td>-37</td>
</tr>
<tr>
<td>Spain</td>
<td>-57</td>
<td>-57</td>
<td>-46</td>
</tr>
<tr>
<td>Portugal</td>
<td>-57</td>
<td>-48</td>
<td>-21</td>
</tr>
<tr>
<td>EU average</td>
<td>-44</td>
<td>-39</td>
<td>-38</td>
</tr>
</tbody>
</table>

* Three-minute call in peak-time. Includes start up cost and does not include VAT
** Tariffs calculated as ARPU/MOU
*** November 2001

Source: European Commission; EMC; Analyst reports
…AND PROLIFERATION OF INNOVATIVE SERVICES

- Intelligent network services: voice-mail, three-party call, calling line identification...
- SIM application toolkit
- Advanced SMS
- WAP
- M-Commerce
- ADSL access
- Video on demand
- ADSL videoconference
- GPRS

Source: Press
However, returns have fallen below cost of capital ...

<table>
<thead>
<tr>
<th>Operators</th>
<th>1997</th>
<th>2001</th>
</tr>
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<tbody>
<tr>
<td>Telecom Italia</td>
<td>0.4%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Telefónica</td>
<td>7.9%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>British Telecom</td>
<td>4.5%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Deutsche Telekom</td>
<td>-1%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>France Telecom</td>
<td>0.7%</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Vodafone</td>
<td>22.5%</td>
<td>-7.2%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>5.8%</td>
<td>-2.6%</td>
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* ROIC net of UMTS licenses
Source: Datastream; Bloomberg
THE SEVERE INDUSTRY CRISIS PUTS IS ALREADY HAVING SERIOUS CONSEQUENCES

Downwards trend in industry results...

- Record breaking losses in telecom operators
- Several attackers going bankrupt
- Difficulties for new operators to achieve EBITDA breakeven

... creates doubts about the sustainability of the current model

- Major job cuts
- Sharp reductions in CAPEX
- Delays in new projects
**RECENTLY ISSUED EU DIRECTIVES CALL FOR AN EVOLUTION OF REGULATORY FRAMEWORKS IN ALL MEMBER STATES**

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Content</th>
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<tr>
<td>1996 - 1997</td>
<td>Creation of a regulatory framework for the liberalisation of the telecom sector</td>
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<thead>
<tr>
<th>Year</th>
<th>Event</th>
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- **Content**
  - Adoption of a series of EU directives to achieve the liberalisation of the telecoms industry
  - Access (open network-provision)
  - Universal service
  - Interconnection
  - Licensing
  - Data protection

- **Effects on telecom markets**
  - Abolition of privileges and exclusive rights of wireline incumbent operators
  - Entry of new wireline and wireless operators

**Evolution of regulatory frameworks in acknowledgement of progress in the liberalisation process**

- Publication* of a new series of EC Directives to advance in the telecoms liberalization process in the direction of gradual deregulation:
  - Framework directive
  - Access directive
  - Authorisation directive
  - Data Protection directive
  - Decision on Spectrum
  - Recommendation on Relevant Markets

- Requirement to change telecommunications laws in all Member States by 24 July, 2003

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* UK started the liberalisation movement in 1984

Source: EU Legislation
THE “SPIRIT” OF THE NEW EUROPEAN DIRECTIVES IS THE GRADUAL Deregulation OF THE TELECOM MARKETS

Guiding principles

• Gradual deregulation of telecommunications markets as effective competition is attained

• Ex-post application of general Competition Law to gradually replace telecom-specific ex-ante regulation

• Rigorous market analysis according to general rules of Competition Law for determination of significant market power (SMP) and imposition of obligations to dominant operators

• Proportionality between obligations imposed to dominant operators and the lack of effective competition in the markets

• No inappropriate ex-ante regulation of emerging markets
A BASIC PROCEDURE IS DEFINED FOR MARKET ANALYSIS AND IMPOSITION OF OBLIGATIONS TO DOMINANT OPERATORS

1. Market definition at European level
   - European Commission recommends list of markets to be analysed by NRAs
   - Draft list recently published for public consultation

2. Market definition at national level
   - NRAs to define list of markets to be analyzed at national level
   - EC has right of veto on any market not included in its recommendation

3. Competitiveness analysis
   - NRAs to analyse, under defined periods, the competitive situation of each market according to general competition criteria

4. SMP* designation and imposition of obligations
   - NRAs, to identify SMP operators in non-competitive markets
   - NRAs to impose certain obligations to SMP operators proportionate to competitive constraints

* SMP= Significant Market Power
A DRAFT LIST OF RELEVANT PRODUCT AND SERVICE MARKETS HAS BEEN PUBLISHED FOR PUBLIC CONSULTATION

### Relevant markets

**Retail**
- Access to fixed networks
- Services from fixed networks
- Leased lines
- Call origination on fixed networks
- Call termination on individual fixed networks
- Wholesale local access for broadband Internet services
- Local dedicated capacity (Wholesale local or leased lines)
- Call termination on individual mobile networks
- National market for international roaming
- Broadcasting transmission services and distribution networks

**Wholesale**
- No retail market in wireless
- Broadband not explicitly separated
- Termination markets are “individual” (i.e., all operators considered dominant)
- Roaming defined at national level
- Broadband explicitly separated
- Broadcasting market introduced

Source: Public consultation on draft Commission Recommendation
THE NEW DIRECTIVES OPEN UP SEVERAL REGULATORY TOPICS …

<table>
<thead>
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<th>Main aspects introduced</th>
</tr>
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<tbody>
<tr>
<td><strong>Framework Directive</strong></td>
</tr>
<tr>
<td>• Definition of NRA functions and competences</td>
</tr>
<tr>
<td>• Definition of “significant market power” (SMP) in line with Competition Law</td>
</tr>
<tr>
<td>• New methodology for the analysis of competition in relevant markets</td>
</tr>
<tr>
<td>• Inclusion of TV and radio distribution networks within the scope of telecommunications law</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th><strong>Access Directive</strong></th>
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<tbody>
<tr>
<td>• Generalization of “access” definition, extending the potential regulation to new elements</td>
</tr>
<tr>
<td>• Principle of “technological neutrality”</td>
</tr>
<tr>
<td>• Regulation of “maxima”, to be applied case-by-case to tackle specific market failures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Universal Service Directive</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Functional access to Internet (narrowband) introduced in USO</td>
</tr>
<tr>
<td>• Retail regulation to be used only when wholesale regulation has proved uneffective</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th><strong>Authorization Directive</strong></th>
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<tbody>
<tr>
<td>• Introduction of a general authorization that simplifies and harmonizes procedures to assign licenses</td>
</tr>
<tr>
<td>• Number of licenses to be limited only for the sake of efficient use of scarce resources</td>
</tr>
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<table>
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<tr>
<th><strong>Data protection Directive</strong></th>
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<tr>
<td>• Reinforcement to the right of customer privacy through the need of previous consent</td>
</tr>
<tr>
<td>• Increased requirements to store customer information for potential future investigation by Government agencies</td>
</tr>
</tbody>
</table>

High discretionality awarded to NRA’s for the transposition of directives into their respective national regulatory frameworks
… WITH POTENTIALLY MAJOR IMPLICATIONS BOTH FOR WIRELINE AND WIRELESS OPERATORS

<table>
<thead>
<tr>
<th>Wireline</th>
<th>Wireless</th>
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<tbody>
<tr>
<td>• Opening of additional incumbent’s network elements (e.g., network management systems, billing systems, etc.)</td>
<td>• Opening of dominant operators’ networks to MVNOs at cost-oriented, regulated prices</td>
</tr>
<tr>
<td>• Potential limitation on incumbent’s pricing regulation</td>
<td>• Potential creation of a secondary market for spectrum</td>
</tr>
<tr>
<td>• Limited regulation of emerging businesses (e.g., xDSL)</td>
<td>• Redefinition of procedures for new spectrum assignments</td>
</tr>
<tr>
<td>• Revision of various topics regarding Universal Service (financing, affordable price, …)</td>
<td>• Application of wireline-type regulation to wireless, based on the principle of technological neutrality</td>
</tr>
<tr>
<td></td>
<td>• Regulation of network sharing</td>
</tr>
<tr>
<td></td>
<td>• Limited regulation of emerging businesses (e.g., wireless data)</td>
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NOT EXHAUSTIVE
THE TRANSPOSITION OF EU DIRECTIVES TO NATIONAL REGULATORY FRAMEWORKS COULD HAVE SIGNIFICANT IMPACT ON INDUSTRY ECONOMICS…

Entity value. Percentage. Base 100

Wireline business unit

100

15-25

75-85

Best case scenario
Opening of additional network elements
Retail pricing regulation
Regulation of emerging markets
Others

Worst case scenario

Wireless business unit

100

30-40

60-70

Best case scenario
Entrance to MVNOs
Regulation on spectrum
Cost-oriented termination prices
Others (roaming, network sharing, etc…)

Worst case scenario

NRAs must be careful about clearly understanding the potential trade-offs involved in implementing the new regulatory framework
…AND WILL REQUIRE SIGNIFICANT WORK IN THE COMING YEAR

**European level** (EC-DG XIII)

- **April ’02**
  - European Directives:
    - Framework
    - Universal Service
    - Access
    - Authorization
    - Data protection

- **July ’02**
  - Draft list of relevant markets

- **July 2003**
  - Deadline for entry into force in all Member States of new Laws

**National level**

- **Transposition of EU Directives into national Laws**
  - Commission Guidelines on market analysis and the assessment of SMP
  - Calendar defined at country level

**Short-term priority for operators**

- Relevant markets definition and analysis
- Imposition of obligations to SMP operators

**Clarity of objectives and clear understanding of trade-offs will be critical**

Source: European Commission
IN DEVELOPING THE NEW REGULATORY FRAMEWORK IT IS CRITICAL THAT KEY CHALLENGES ARE ADDRESSED

Success in liberalization

- Effective competition
- Market development
- Service innovation
- High levels of investment

New challenges

- Growth slowing down
- Financing problems
- High investing needed to continue innovation

Is the current industry structure viable?
Is regulation creating a chronically under-performing sector?
Are consumer benefits brought about by market liberalization sustainable?
What impact will financial pressures have on innovation?

Key requirements for the new regulatory framework

- Reduce uncertainty in the industry
- Support business viability
- Foster growth and innovation by creating incentives for investment in infrastructures and services
- Ensure effective competition in the long-term
- Maintain customer benefits