UMTS/IMT2000 LICENSING IN PORTUGAL ...AND BEYOND

BACKGROUND, COMPETITION AND PRESENT SITUATION

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BACKGROUND

Mobile communications in Europe

- By early 2001 – 235 million GSM, meaning that 63% of EU citizens had mobile phones. This number grew to 399.8 million in May 2003 – still a steady growth figure
- The European Telecommunications market worth over 200 bn Euro with an annual growth of 12%
- Mobile communications account for 30% of the total revenues of the telecommunications services sector
- GSM alone has created some 445,000 jobs in Europe

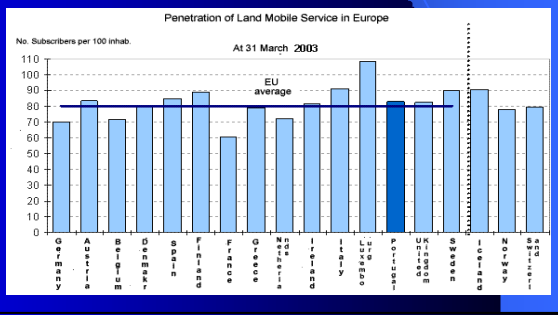
Evolution of the Telecommunications Sector in Portugal

MOBILE TELEPHONY

	1992	1Q 2003
•Number of subscribers	37 262	8 590 300
•Penetration Rate	0%	83,1%

• Penetration Rate in Europe on 30/03/2003

80%

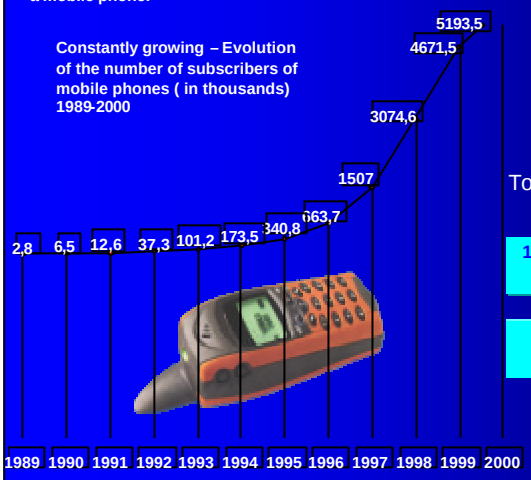


Evolution of the Telecoms Sector in Portugal

Mobile phones > 8 million

For the first time the number of mobile subscribers > 8mio, meaning that close to 2/3 of the Portuguese population has a mobile phone.

Constantly growing – Evolution of the number of subscribers of mobile phones (in thousands) 1989-2000



8.59 million subscribers at end 1stQ 2003

Total mobile traffic

1st quarter / 2002
3.047,2

2003
3226,0

'000 of million of minutes

Short calls – how the Portuguese use their mobile phones

Number of calls per day **3**

Average duration of each call

91 (2001)

In seconds

% of Portuguese > 15 yrs old with mobile phone

62,5%

Evolution of the Telecommunications Sector in Portugal

Year	Fixed Telephony	Land Mobile Telephony	Cable TV Service	Internet Access
1991	2,694	12.6	-	-
1992	3,014	37.3	-	-
1993	3,260	101.2	-	-
1994	3,444	173.5	-	2.0
1995	3,643	304.8	58.0	12.0
1996	3,822	663.7	171.0	46.0
1997	4,002	1,507.0	383.0	88.7
1998	4,117	3,074.6	596.0	172.7
1999	4,230	4,671.5	760.0	474.4
2000	4,314	6,665.0	925.0	2,110.8
2001	4,378	7,977.5	1,119.0	3,459.4
2002 (1Q)	4,368	8,071.3	1,158.0	3,912.2

Values in thousands

Development of Framework for Mobile Communications in Portugal

Regulatory Framework

- 1986
  Public Consultation on Telecommunications Sector launched
- 1989
  Regulator starts operations
  Basic Telecommunications Law Approved
  Launch of Land Mobile Service, using analogue technology by a consortium between CTT and TLP (incumbents) – renamed TMN
  First steps in Liberalization process have positive results

Regulatory Framework

- 1991

  Effective date of liberalization with a good, dynamic, effective and solid level of involvement of the private sector

  Public Tender for the assignment of a license to operate second generation technology - GSM - in the 900 MHz band: 8 bids submitted to tender, involving most major economic players
- 1991-1999

  Within less than 8 years, over 125 licenses and authorizations had been granted to more than 40 companies, including 3rd mobile license

Legislative Framework – Basic Texts

- Law 91/97, 1 August, Basic Telecommunications Law
- Decree-Law 381-A/97, 30 December, Regulations for access to the activity of public telecommunications network operator and public use telecommunications service provider
- Decree- Law 290-A/99 of 30 July, Regulation for the operation of Public Telecommunications Networks
- Decree-Law 290-B of 30 July, Regulations for the operation of Public Telecommunications Services
- Etc….

Specific Texts for IMT 2000

- Ruling 532-A/2000 – approval of the rules for the open competition for the award of 4 national licences for IMT2000/UMTS (as adopted by the ICP Board of Directors on 23 December 1999)
- Decision from the Minister of Social Infrastructure of 1 August 2000, nominating the members of the Evaluation Commission
- Decision from the Minister of Social Infrastructure of 1 August 2000, on the opening of a Public Competition for the award of 4 national licences for IMT2000/UMTS

LICENSING PRINCIPLES AND REGULATORY FRAMEWORK FOR THE PUBLIC TENDER IN PORTUGAL

Aim of Tender model

- To enhance competition in the mobile market
- To encourage a sustained development of operators, including potential newcomers
- To enlarge the choice of consumers
- To encourage the development of the information society in Portugal

Philosophy of Government for the licensing of UMTS/IMT2000

Choice = Comparative Bidding, and not Auction

- Despite significant gains seen across Europe through auctions, decision to continue with previous stance and methodology, i.e. comparative bidding (beauty parade)
- Process of comparative bidding understood to have been one of the reasons behind the significant evolution of mobile phones in Portugal

Philosophy of Government for the licensing of UMTS/IMT2000

Wish to make 3rd generation mobile available to as many consumers as possible at the lowest rate possible

- Idea is that operators would pass on a high cost of the licenses to consumers through high prices for communications
- Idea that new operators would try to recover such high licensing costs quickly through a strategy which concentrates on high population areas

Philosophy of Government for the licensing of UMTS/IMT2000

Wish to provide 2G operators with the best chance possible of winning license for 3G whilst still obliging everyone to compete

- Costing of license takes into consideration that some of the second generation operators still had significant investments to recover
- Although everyone had to compete for the licenses, a certain “preference” was given to 2nd generation operators through valorization of roaming offers by 2G operators

Philosophy of Government for the licensing of UMTS/IMT2000

Wish to make the promotion of the information society a key factor in the UMTS/IMTS licensing process

- The promotion of the Information Society was one of the main priorities of the Portuguese Presidency of the EU, with a special Summit dedicated to the subject and a specific program (E-Europe 2002) adopted during this Summit
- The government wanted tenderers to give special attention to this aspect, amongst others, by including original thinking in their proposals related to:
  - Bringing the information society to people with special needs
  - Coverage of regions "with special needs"

Licensing Principles

- PUBLIC TENDER
- FOUR LICENSES to be attributed
- FORESEEN TIMETABLE: quick turnaround - tender to be opened in 3rd quarter of 2000, with licenses attributed in 1st quarter 2001, and services provided as from 1 January 2002 – DELAYS ENCOUNTERED
- Principle that no licenses were to be attributed unless at least one of the proposals was based on the UMTS standard and fulfilled all the requirements set out in the respective regulations

Licensing Principles

- SPECTRUM: 2 x 15 MHz of paired spectrum in the bands of 1920-1980 MHz / 2110-2170 MHz and 5 MHz of unpaired spectrum in the 1900-1920 MHz band, for each of the licensees
- DURATION OF LICENSES: 15 years, renewable
- COST= +/- 10 million US $ license fee + annual spectrum fee

Licensing Principles

ROAMING

- Roaming between UMTS/IMT2000 system and 2nd generation systems possible under the terms foreseen in Decree-Law 415/98 of 31 December
- Roaming offer = one of the valorization criteria of proposals
- Any roaming offer to be valid for at least 5 years, unless UMTS/IMT2000 operators who do not have GSM or DCS systems = declared as having SMP (Significant Market Power) in the UMTS/IMT2000 market

Licensing Principles

ROAMING

- Roaming offer conditions = subject to re-evaluation by the Regulator two years as from the date of attribution of the licenses
- Roaming offer conditions must adhere to a set of parameters established in the tender regulation
- The tender regulation foresaw that the Regulator may intervene in the resolution of legal disputes that may arise amongst interested parties as related to roaming

Licensing Principles

- COVERAGE OBLIGATIONS: establishment of minimum coverage obligations , which must ensure debits above 128 Kbps, with detailed specifications which were included in the tender regulations according to the following schedule:
  - 20% coverage of the national population by the end of the first year of the license coming into force,
  - 40% by the end of the third year, and
  - 60% by the end of the fifth year

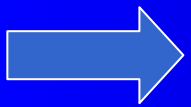
Licensing Principles

- None of the three licensed GSM or DCS operators will automatically be granted an IMT 2000 license

BUT ... Proposals which offered the possibility of national roaming between second and third generation systems were granted extra points in the evaluation.....

Licensing Principles

Limits are to be imposed on shareholdings in competing commercial enterprises, so as to ensure that no bidder holds any shares, directly or indirectly, in the share capital of another bidder.



- No shareholder of a licensed operator may hold, either directly or indirectly, more than 10% of the capital of another licensed operator
- Where an investor is part of a successful group which is granted a license, then such an entity will have to sell his stake in the other licensed operator within a year of the license being granted

THE TENDER PROCEDURE

Elements to be included in proposal

- Official Documents
- Technical Proposal
  - Coverage plans,
  - Planning and development of the system,
  - Quality of service levels, amongst others
- Economic and Financial Proposal
  - Market development forecasts,
  - Marketing strategy,
  - Roaming offers,
  - Range of services to be offered, including special offers,
  - Pricing policy,
  - Distribution channels,
  - Financing resources, amongst others

Evaluation Criteria

- Contribution to the development of the Information Society – 50%;
- Contribution to the development of effective competition – 20%;
- Quality of the Technical proposal – 15%;
- Quality of the Economic and Financial proposal – 8%;
- Contribution to the development of a sustainable economic activity – 7%.

Evaluation Grid

- Contribution to the development of the Information Society – 50%
  - Coverage indicators
    - Population covered,
    - Surface covered,
    - Areas covered,
    - Roads covered
  - Promotion of universal access and of info-inclusion with an economically accessible offer targeted at different user profiles
    - Price policy (reference prices, flexibility, promotional policies and discounts),
    - Special conditions for low income population (notably in terms of access, prices and quality),
    - Special conditions for users with special needs,
    - Special conditions for institutions with special needs

Evaluation Grid

- Contribution to the creation of effective competition – 20%
  - Diversity and differentiation of the range of services with special emphasis to the offer of innovative and convergent services/contents
  - Conditions associated with the roaming offer
    - Phasing of the offer,
    - Coverage,
    - Other aspects (notably price policy)
  - Global quality of the services
    - Commercial Quality (amongst others access, customer care service, after sales service, commercial policy related to the replacing of equipments, billing),
    - Other quality parameters, notably related to dispute handling and information policy to the users

Evaluation Grid

- **Quality of the technical plan – 15%**
  - Conditions related to the sharing of infrastructures (sites and support infrastructures),
  - Coverage planning,
  - Frequency plan,
  - Technological system and network topology,
  - Measures to minimize the environmental impact,
  - Measures to minimize human exposure to electromagnetic radiations,
  - Security and network confidentiality,
  - Network performance,
  - Interconnection plan,
  - Numbering/addressing

Evaluation Grid

- **Quality of the economical and financial plan – 8%**
  - Market study,
  - Strategy,
  - Economic evaluation (VAL, TIR, pay-back),
  - Financial evaluation,
  - Sensibility analysis (notably in terms of prices, number of subscribers and traffic volume),
  - Commercial and economic-financial qualifications (experience in mobile services/networks, commercialisation/distribution…)

Evaluation Grid

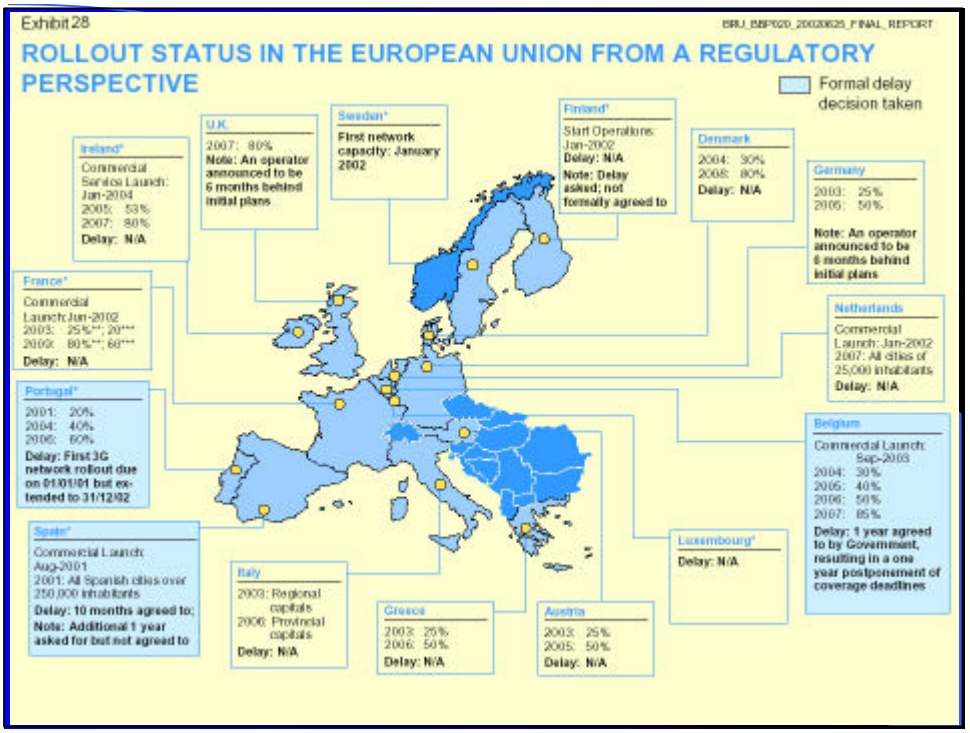
- **Contribution to the development of a sustainable economic activity – 7%**
  - Project externalities
    - Industry and technology development,
    - Market expansion (effects on the mobile value chain, penetration and use of data and voice mobile services),
    - Direct and indirect creation of employment,
    - Training, research and development,
    - Others
  - Degree of development of the project/consortium notably in terms of agreements and/or partnerships related to services/contents, technology/know how, etc.

WINNERS

- Telecel (2nd Generation Mobile Operator) – now Vodafone
- TMN (2nd Generation Mobile Operator) – PT spin-off
- Optimus (2nd Generation Mobile Operator) – France Telecom and Sonae Group
- Oniway (EDP = Electricity Operator and 2nd Fixed Operator)

UMTS roll-out and evolution:

Lessons Learnt



Key Lessons to be Learnt from 3G Licensing Process

- 3G licensing created significant transition problems in mobile markets
  - Substantial value was extracted from the mobile market (high license fees, deflating stock prices and worsening debt ratings),
  - Severe funding problems have occurred for certain operators (e.g. EDP/Oniway in Portugal) – leading to delays in roll-out and application developments or even withdrawal from process (Portugal),
  - There was a significant increase in the cost of supply,
  - Imbalance between cost of supply and expected demand and potential revenues in Member States

Key Lessons to be Learnt from 3G Licensing Process

- 3G licensing allowed for distortions to occur in terms of:
  - The impact that the evolution of market expectations had over time,
  - The number of licenses offered – this influenced the number of potential candidates and stimulated competition amongst bidders,
  - The specific characteristics of the awards methods and the way in which they were designed pushed the operators bid up

Key Lessons to be Learnt from 3G Licensing Process

- Other stakeholders are also dealing with the "big bet" on 3G: end-users, European vendors, content developers, and governments – considerable resources and funds have been spent on and committed to the rollout and development of UMTS
- For years to come, a significant mortgage has been put on the sector in the EU, in terms of finances and profitability and probably even in terms of the introduction of alternative mobile technologies in the market

All those involved have to review their strategies, investments and expectations and decide on priorities.

Portuguese situation

- Various decisions made (especially by regulator) to attempt to allow 4th licensee (Oniway) to survive:
  - National roaming agreement with TMN approved by regulator and other operators were encouraged to make similar agreements with new entrant, Oniway (did not happen),
  - Original licensing conditions changed
  - Various delays in launch approved

p.s.: Oniway only new entrant and only licensee who did not have 2G license

Newest 2G operator (Optimus) had not reached break-even point at that stage

Infrastructure sharing was, in fact, one of the criteria in the license selection procedure

ANACOM Decision Dec 2002

- Time limit for launch is delayed to 31 December 2003
- All obligations covered by licenses maintained
- A fee for radio spectrum usage will be applied to operators who start their activities in 2003

Portuguese Situation –Dec 2003

ICP/ANACOM :

- The confirmed absence in the market of network and terminal equipment is a case involving ‘force majeure’
- Any amendments to the licenses should be restricted to the time limit for the commercial offer of the UMTS systems and should not affect the central core of the obligations assumed by licensees in their tenders
- Pilot networks suitable for testing should be encouraged

Portuguese situation – Jan. 2003

- Infrastructure sharing amongst operators is to be encouraged through incentives such as decreases in the amount of fees for spectrum usage
- Some flexibility is to be granted as to the number of control centers and base stations, without ceding on the need to comply with coverage obligations as set out in the licenses
- The delay in the launching of 3G should not be an obstacle to the launching of the Information Society development projects

Portuguese Situation Jan. 2003

THIS WAS THE FINAL STRAW FOR ONIWAY .....

Portuguese Situation – Jan. 2003

- On 9 January 2003, ICP/ ANACOM
  - Accepted the return of the 4th license
  - Concluded that there is no place for a 4th operator, given:
    - The small size of the national market,
    - The high penetration rates of mobile services,
    - The lack of interest of other economic agents to obtain a UMTS license or to purchase OniWay
    - The substantial competitive advantage of first entrants (as shown in case of Optimus)

Portuguese Situation – Jan. 2003

- ICP/ ANACOM recognized that:
  - Small operators or operators whose market share is small have extreme difficulties in remaining in the market
  - A new entrant into the market will not necessarily increase the value of the market

Portuguese Situation – Jan. 2003

- ICP/ ANACOM also recognized that:
  - The preservation of the 2G market structure may actually allow/lead to:
    - a faster recovery of investments,
    - an increase of cost-effectiveness levels,
    - a better investment capacity of existing operators,

    and particularly to reflexes such as :
    - a faster offer of 3G services,
    - the creation of conditions for lower prices,
    - the improvement of quality of services

To Summarize - Portuguese Situation January 2003

- 3 operators left (all also 2G mobile operators) – Oniway returned its license
- "Oniway" frequencies were divided amongst remaining licensees
- Delays approved – now foreseen for 31 December 2003

Changes/Clarifications in other European Countries

- Dates for the roll-out of the UMTS network and the commencement of the commercial offer of UMTS
- Dates for compliance with coverage obligations
- Sharing of Infrastructures
- Extension of the period of validity of licenses
- Return/Withdrawal of licenses

EU Position

The Council of Ministers of the European Union stated at it meeting of 5/6 December 2002 that:

"there is a need to ensure the transparency of the obligation to launch the 3G systems and the need to start the debates on more flexible approaches as to the spectrum use and network infrastructure sharing, as well as to the possibilities of infrastructure sharing, spectrum re-allocation so as to aim for a more effective market and appropriate coordination at European level"

Lessons for Governments considering UMTS/IMT2000 for the future

- Governments now have the opportunity to design a process that will allow national mobile networks to develop at a rate that is beneficial to the whole economy and which is expected to compensate for lower license fee revenues,
- Governments will not necessarily have the complication of having to create future legislation to take back licenses from failing operators (as has happened in Portugal, Spain and Slovakia).

Lessons for Governments considering UMTS/IMT2000

- Governments will have the opportunity to be more creative with their policies on issues including infrastructure sharing, Mobile Virtual Network Operators (MVNOs), and infrastructure roll-out schedules.
- When combined with lower license fee expenses, more flexible policies will give operators more strategic and financial flexibility to launch infrastructure and service projects.

Lessons for Governments considering UMTS/IMT2000

- The indirect effects of a well-thought out strategy , which has learnt from past lessons, are likely to promote information technology investment and employment environments, which could more than offset the reduced expectations on license fee revenues


UMTS/IMT2000
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PORTUGAL
...AND BEYOND
THANK YOU
FOR YOUR
ATTENTION
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