

Telecommunications markets and regulations in Mediterranean countries

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Foundations for this work

- **The SERENATE project regulatory study (2002) supported by DANTE:**
 - Implications for NRENs of EU regulation.
 - Focus on candidates for EU accession.
 - Emphasis on New Regulatory Framework (NRF).
- **The EARNEST project regulatory study (2007) supported by DANTE:**
 - Update on regulation relevant to NRENs with NRF.
- **The NATP2 programme (2005-2008) led by Regulaid:**
 - Workshops and bilateral support for ICT regulators of the participants (all EUMEDCONNECT countries except Cyprus and Malta).
 - Convergence in regulation among the participants and with the EU.
- **The NATP2 country analysis 2007 due to Frontier Economics.**
- **The EUMEDGRID country analysis 2006 due to the University of Malta.**

Contents of the presentation pack

- **For overview talk:**
 - **Markets in the MEDA countries (outline).**
 - **Regulation relevant to NRENs in the EU (outline).**
- **Back-up reference materials:**
 - **Regulation relevant to NRENs in the EU (some details).**

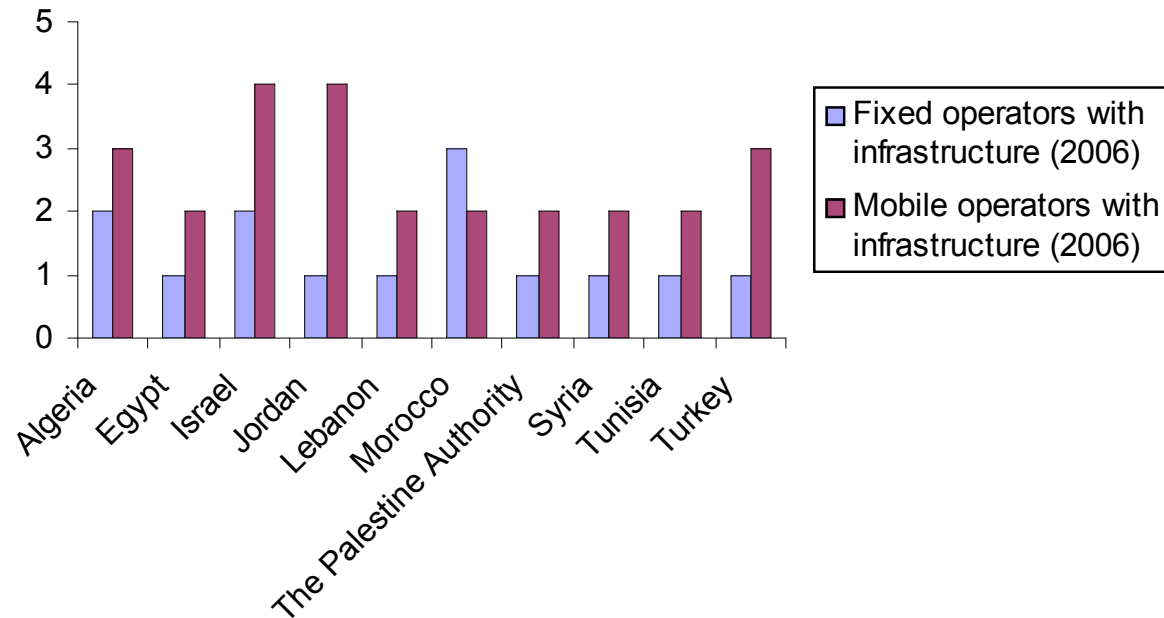
General status of markets in the MEDA countries

- **Supply:**
 - Leased lines come mainly from the incumbent fixed network operator.
 - DSL is deployed in all countries.
 - 3G is licensed in few countries.
 - WiMax licences have been issued in most countries.
 - WiFi is restricted or requires licensing in several countries.
- **Demand:**
 - Fixed penetration is low and static.
 - Mobile penetration is much higher than fixed, and rising fast.

General status of regulation in the MEDA countries

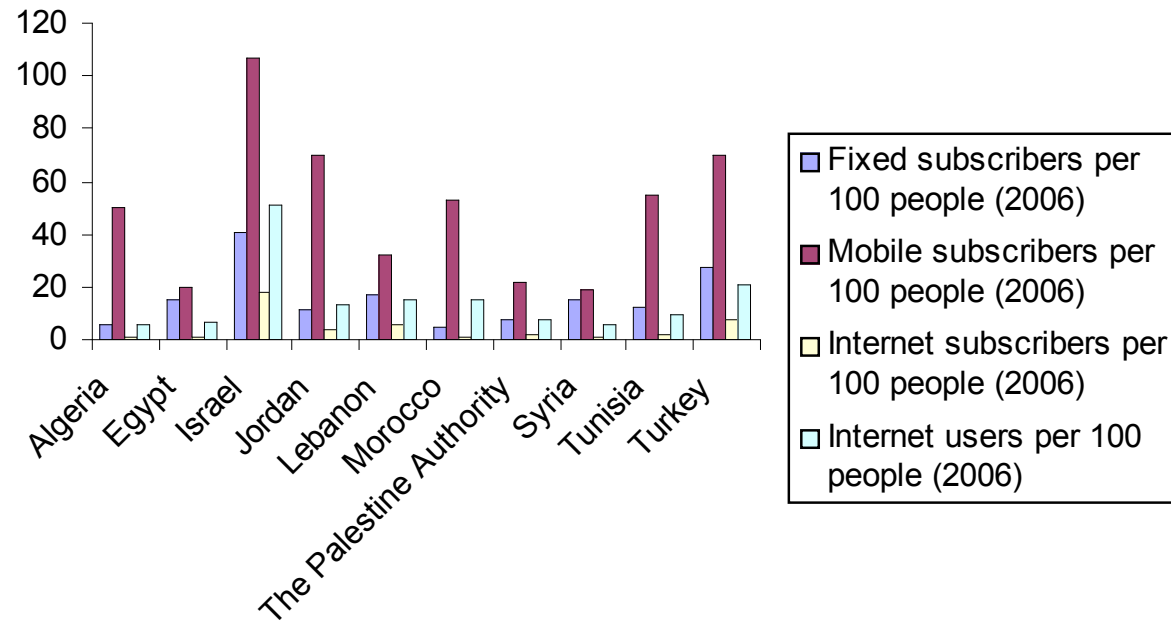
- **Considerable recent efforts are yielding positive results:**
 - Regulators are becoming more independent.
 - Interconnection pricing is moving towards being based on costs.
 - Significant Market Power (SMP) is determined by clear rules more often.
- **Countries are at different stages of development, but all moving forward.**

Numbers of operators in the MEDA countries (2006)



Source: Regulators, ministries and operators. Since then the numbers of operators with infrastructure have changed in some countries, such as Algeria and Egypt..

Numbers of subscribers in the MEDA countries (2006)



Source: ITU ICT/Telecommunications Indicators Database, 2006. Since then the numbers of mobile subscribers have changed in several countries, but official figures are not yet available from the ITU.

Examples of good practice in the MEDA countries

- **Encouragement to carry voice over IP and build networks:**
 - Algeria, Morocco.
- **More than 2 mobile operators:**
 - Algeria, Egypt, Jordan, Turkey.
- **WiMax licences:**
 - Jordan, Morocco, Tunisia.
- **WiFi exemptions from licensing:**
 - Egypt, Israel.
- **Calling card or carrier selection services:**
 - Turkey.
- **Rules for determining price caps and interconnection charges:**
 - Jordan, Morocco, Turkey.
- **Exemption from price approvals except for SMP operators:**
 - Israel.
- **Backbone co-ordination for educational purposes:**
 - Jordan.

Policies to help NRENs in MEDA countries: infrastructure

- **Developing high capacity backbones:**
 - Backbone unbundling by incumbent fixed network operators.
 - Backbone construction by mobile network operators, perhaps with shared access for them and open access for others.
 - Backbone enhancement by utilities, open to others and perhaps forming alternative public networks.
- **Fostering broadband access:**
 - Spectrum exemption from licensing and other restrictions.
 - Spectrum availability in standard licensed ranges for broadband.
 - DSL provision by incumbents.
 - Local loop unbundling (perhaps too complex).

Policies to help NRENs in MEDA countries: usage

- **Encouraging widely useful services and content, such as:**
 - **VOIP.**
 - **Voice, not just text, on web pages for low-literacy people.**
 - **On-line tutorials, tests and forms.**
 - **Health checks, for people, animals and plants.**
 - **Monitoring and control of irrigation and similar systems.**

Demand for NRENs and their services will grow if people recognise the value of the Internet.

Key aspects of EU regulatory framework

- **Flexibility in market development:**
 - Open entry for all, with more reliance on competition law.
 - Ex ante regulation limited to where market reviews show Significant Market Power (SMP)
 - often focused on interconnection and local loop unbundling.
- **Harmonisation among countries:**
 - Committees review national regulatory decisions.
 - European Commission (EC) can influence and sometimes veto them.
- **Handling of convergence:**
 - Neutrality among technologies, including broadcasting.
- **Consumer protection provisions:**
 - Universal service and user rights.
 - Carrier selection and number portability.

Implications for NRENs of the EU regulatory framework

- **Indirect: major effects, which are generally positive:**
 - **Benefits from the controls on operators with SMP.**
 - **Benefits from the stimulus for new competitors, at least for high speed links.**
- **Direct: minor effects, which may be less clear:**
 - **Need to clarify whether to be private networks or to have the rights and obligations of public networks.**
 - **Services provided outside closed user groups using state aid may be seen as competing unfairly.**
 - **Ability to own infrastructures, as well as to use infrastructures from others.**

Current issues in EU regulatory framework: infrastructure

- **Getting rights of way is difficult in some countries:**
 - and almost impossible, in practice, in a few.
- **States can fund broadband construction, subject to competition rules:**
 - the European Commission enforces these.
- **Next Generation Network (NGN) construction is causing debate:**
 - one incumbent may get a “regulatory holiday”.
- **Radio spectrum management is moving towards:**
 - technology-neutrality
 - licence-exemption
 - spectrum trading.

Current issues in EU regulatory framework: convergence

- **Suppressing spam needs more action by regulators and ISPs:**
 - Application of readily available (but imperfect) tools.
- **Data retention (of message headers but not contents) requires careful implementation:**
 - Need both to preserve privacy and to keep costs low.
- **Encouraging voice over IP while protecting consumers needs more thought:**
 - Concern for emergency calls, in particular.
- **Mass media scheduled and on-demand “programmes” become subject to audiovisual regulation:**
 - Advertising, rights of reply and protection of minors.

Current issues in EU regulatory framework: procedures

- **Regular enforcement efforts lead to recurrent complaints about some countries, such as:**
 - Turning the Framework into law took several years.
 - Independence of regulators needs vigilance.
- **The current Framework Review is leading to agreed changes:**
 - Rules and SMP determinations should be streamlined.
 - Appeals should not hold up remedies by default.
- **A central regulator might make national regulators more consistent:**
 - But most national regulators would rather strengthen the European Regulators' Group (ERG).

Conclusions for NRENs about EU regulatory issues

- **NRENs are being helped by evolution of the regulatory framework.**
- **NRENs should monitor changes in attitudes as much as changes in regulations.**
 - **Example: stress on applying market forces to spectrum.**
- **NRENs could work together to exchange regulatory information and express shared opinions.**
- **NRENs should consider adopting relevant best practices for public networks, even if they are private networks.**

Back-up material: contents

- **Regulation relevant to NREs in the EU:**
 - Review of the New Regulatory Framework
 - Harmonisation of data retention
 - Modernisation of audiovisual regulation
 - Intervention for broadband deployment
 - Stimulus to next generation network construction
 - Liberalisation of radio spectrum management
- **Further details are in a background paper for EARNEST.**

Review of the New Regulatory Framework

- **Status:**
 - Launched in 2005.
 - Consulted on in 2006.
 - Proposed in 2007.
 - Turned into national law from 2009.
- **Main points:**
 - Existing rules need updating.
 - Market review burdens need to be cut.
 - The single market needs consolidation, perhaps with a central regulator.
 - Security and consumer protection need improvement.
- **NREN implications:**
 - There is little impact except on public networks.
 - The suggested security improvements are good practice anyway.

Harmonisation of data retention

- **Status:**
 - Adopted in 2006.
 - Turned into national law in 2007.
- **Main points:**
 - To help fight crime, providers of public networks/services must keep data on calls and messages (not their content) for 6 months to 2 years.
- **NREN implications:**
 - There could be pressure to adopt practices consistent with the Directive, which a working group might prepare for.

Modernisation of audiovisual regulation

- **Status:**
 - Proposed in 2005.
 - Revised in 2006.
 - Adopted in 2007.
- **Main points:**
 - Content delivery competing with TV (e.g. by Internet) should comply with TV regulation (European content, protection of minors, advertising / sponsorship control, right of reply and so on).
- **NREN implications:**
 - NRENs are probably outside its formal scope, but would be wise to check that NREN good practice observes the spirit of the rules.

Intervention for broadband deployment

- **Status:**
 - “Bridging the Broadband Gap” is an important element of i2010, which in turn crucially supports the Lisbon Strategy for growth and jobs.
- **Main points:**
 - Public intervention for broadband provision in underserved areas, including state aid and EU regional development funding, is good if anticompetitive effects are avoided.
- **NREN implications:**
 - NRENs needing better connectivity in underserved areas (including to homes of staff and students) should consider sharing funding and facilities with other organisations.

Stimulus to next generation network construction

- **Status:**
 - Covered by NRF Market Analysis procedures (under review).
 - Dependent on EU infringement proceedings for DT's "regulatory holiday".
- **Main points:**
 - NGNs (first core, then access) are being built, despite uncertainty about returns.
 - Lack of clarity on mandated resale (related to meaning of "new markets") may deter investment.
- **NREN implications:**
 - NRENs' interests might be best served by maximised investment in fibre access networks.
 - Clarity on "new markets" could help; perhaps a joint NREN working group might develop shared policies.

Liberalisation of radio spectrum management

- **Status:**
 - Reflected in NRF Review, and through other parallel developments.
- **Main points:**
 - New technology makes it both more important and easier to use spectrum flexibly.
 - There are major moves towards spectrum markets and away from administrative allocations.
- **NREN implications:**
 - Indefinite free use of existing spectrum allocations (on-campus wireless, for example) cannot be assumed.
 - NRENs may need to consider both funding and new (possibly shared) spectrum allocations.