



**Tuesday, October 20**  
**11:00 am–12:30 pm**

## **306 Calling All Countries: The VOIP Revolution is Here!**

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*Head, Global Operational Regulation & Americas Regulation*  
BT Global Services

**Anthony Oliver**

*Attorney*  
Microsoft Corporation

**Andrew Powell**

*Vice President and Assistant General Counsel*  
Leap Wireless International, Inc.

## Faculty Biographies

### **Sheba Chacko**

Sheba Chacko heads up global operational regulation and Americas regulation for BT. Ms. Chacko is based in Reston, VA. She and her team handle regulatory advocacy and compliance for BT's businesses in North, Central and South America, and provide regulatory advice and support on global contracts, global product deployments, M&A and outsourcings.

Prior to her employment by BT, she worked at U.S. law firms primarily representing and advising clients in the U.S. wireline, wireless, satellite, and broadcast industries.

Ms. Chacko has served on the Duke Law Alumni Board and on the FCC's Diversity Committee.

She earned a BA from the University of Texas, a JD from Duke Law School and an LLM in International and Comparative Law from Georgetown.

### **Anthony Oliver**

Anthony Oliver is an attorney with Microsoft Corporation in Redmond, WA. He acts as the primary legal support for Microsoft's chief information officer (CIO) and Microsoft's information technology group worldwide. In this role, Mr. Oliver provides legal counsel to the Microsoft IT organization on any and all legal issues, including IT outsourcing contracts, privacy and data security, telecommunications regulatory issues, intellectual property, and other legal issues.

Prior to joining Microsoft, Mr. Oliver was an attorney with Davis Wright Tremaine LLP in Seattle providing legal counsel regarding technology and commercial contracting, financial transactions, and other general legal guidance primarily to large multi-national corporations.

Mr. Oliver is a member of ACC's IT, Privacy & eCommerce Committee, the Washington and Maryland State Bar Associations, and the ABA business law section.

Mr. Oliver received a BA from Denison University and is a graduate of the Georgetown University Law Center.

### **Andrew Powell**

Andrew Powell is the vice president and assistant general counsel for Leap Wireless in San Diego. His responsibilities include providing legal counsel to the operations side of the business, supervising a team of nine other attorneys, and supporting the business development team on strategic transactions and M&A activities.

Prior to joining Leap, Mr. Powell served as first as senior counsel then associate general counsel for Hughes Network Systems in Germantown, MD. Prior to Hughes, Mr Powell was a transactional attorney with several large international law firms based in London then Washington, DC.

Mr. Powell received a LL.B from Coventry University (UK) and an LL.M from University of Cambridge (UK).

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### Agenda

- What is VoIP?
- Regulating VoIP Globally
  - U.S. Framework
  - EU Framework
  - Asia / Pacific
- VoIP in a Wireless World
- VoIP for Global Enterprise Voice
- Enterprise VoIP Customers
- Q & A

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### What is VoIP and why do we care?

- What is VoIP? = Voice over Internet Protocol
  - Uses broadband Internet connectivity
  - Voice stream converted to data packets and transferred
  - Reassembled and reconverted to voice stream at other end
- Why do we care?
  - Functions
  - COST!!

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### U.S. VoIP Regulatory Framework

- Telecommunications - Extensive regulation
  - Standard telephone service, wireless, satellite and paging
- Information Services - Generally exempt
  - Email, voicemail, video and Internet
- **"Interconnected VoIP"**
  - Not a telecommunications service but still subject to some telecom requirements

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## EU VoIP Regulatory Framework

- Electronic communications networks
  - Physical infrastructure
- **Electronic communications services**
  - Communications conveyance
  - Interconnected VoIP
- Information society services
  - Online Services
- EU Proposing Changes
  - Interconnected VoIP, emergency calling, etc.

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## Asia-Pacific VoIP Regulation

- Highly regulated
- Different services subject to different regulation
- Japan
  - PC-to-PC okay
  - Others: "Former Type 2 Carrier"
- India
  - PC-to-PSTN **within** India – NOT allowed

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## Example: China

- Classified as "basic" or "value added telecoms services" (VATS)
- Permits required if under either
- Restrictions on foreign investment

Service	Permit
PSTN-Interconnected VoIP	Telecom Service Operating Permit
Other Commercial VoIP (PC-to-PC)	VATS Permit
Non-Commercial VoIP	none
Email, search, web portals	VATS Permit
Video Communications	VATS Permit

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### Global VoIP Regs – Key Takeaways

- Other countries often more highly regulated than US
- "Interconnected VoIP" is generally regulated
- Different VoIP services regulated differently (e.g., China and India)
- VoIP functionality may be regulated even if service is permitted

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### VoIP in a Wireless World

- VoIP issues for the wireless industry
  - Long term migration to IP by carriers
    - Traditional being replaced by IP transmission
  - Eventual platform for end-to-end voice service
    - Example: LTE VoIP transmission

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### Wireless VoIP – Pro and Con

- Advantages
  - Guarantee quality of service end-to-end
  - Service optimized for wireless and lower cost
    - Example: Avoid third-party interconnect/access charges
- Difficulties
  - "Net Neutrality"
  - VoIP application limitations
    - Network and bandwidth management
    - Mobile phone limited capability to download and install mobile VoIP applications

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### Wireless VoIP Regulation - US

- Intersection of wireless platforms, VoIP applications and Net Neutrality
- FCC's 2005 *Internet Policy Statement*
  - access lawful Internet content they choose
  - run applications and use services they choose
  - connect to choice of legal devices that do not harm network
  - competition among network providers, application and service providers, and content managers
- Subject to "reasonable network management"

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### Wireless VoIP Regulation (cont.)

- Skype "Carterfone" Petition – pending at FCC
  - Apply *Internet Policy Statement* and net neutrality to wireless
- Device Management Proceedings
  - RCA handset exclusivity request
  - FCC / U.S. Copyright cell phone locking
  - FCC Apple-AT&T inquiry – Google Voice VoIP application
- Broadband Stimulus Package
  - Nondiscrimination and net neutrality attaches

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### VoIP for Global Enterprise Voice

- Profile of a global enterprise user
  - Wants seamless, reliable, secure VoIP
  - Same look and feel regardless of country in which service is used
  - Travels and wants same number and functionality
- But there are regulatory constraints!
  - Absolute bans on VoIP, licensing hurdles, compliance requirements

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### Global Enterprise VoIP Constraints

- Geographic Phone Numbers
  - Limited use outside geographic area
- E911 Requirements
  - Connection required and call location info transmitted
- State Security Agency Interception
- Data Retention
  - Retain VoIP calls and emails transcriptions
- Data Privacy
  - Access recordings/transcripts outside EU, etc.

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### Coping with Global VoIP Constraints

- Check if particular use triggers regulation
  - Computer to computer VoIP
  - Closed user group VoIP
  - Not two-way VoIP interconnected to the PSTN
- Potential leeway for corporate users
  - Corporate users vs. residential users
  - Public policy may not require protection of corporate users

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### Coping with Global VoIP Constraints (cont.)

- Self-providing VoIP customer less regulated
- Use PSTN / PBX for E911 compliance
  - Maintain PSTN line out of each customer office
  - Routes emergency calls over PBX to PSTN line to emergency provider answering facility
- Customer Consent to Store / Access Data
  - Permit outside jurisdiction that call was originated or terminated

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### Enterprise VoIP Customers

- Not as regulated as the provider
  - But may not be legal to use via standard ISP
- E911 compliance
  - Dealing with Portability and Power
- Law enforcement cooperation
  - CALEA and call intercept
- Accessibility requirements

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### VoIP as Data

- Privacy and data protection rules
- Monitoring Issues (EU employees, etc.)
- Recording calls
  - Conferencing
  - Unified messaging
- Data retention policies
- Litigation eDiscovery

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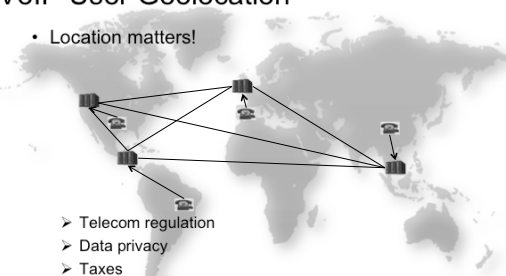
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### VoIP User Geolocation

- Location matters!



- Telecom regulation
- Data privacy
- Taxes

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## CLOSING COMMENTS

- Key Takeaways
  - VoIP is becoming ubiquitous
  - Global VoIP regulation is complex and growing
  - Regulators have different reasons behind VoIP regulations
  - Different functions regulated differently
  - Service providers, wireless providers and customers all impacted
  - Regulation goes beyond telecom – DATA
- Supplemental Materials / Appendix

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## Supplemental Materials

- EU Directives/Proposals
- FCC Internet Policy Statement
- Skype Wireless Device Petition
- E911 US State Regulations Synopsis
- Regulated/Not-Regulated Cheat Sheet
- Issues/Features Checklist(s)

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## Japan VoIP Regulation

- Highly regulated
- Email, search, web portals – regulated as "Former Type 2 Carrier"
- Key factor in regulation may be hosting in Japan.
- PC-to-PC VoIP
  - Strictly peer-to-peer communications – not regulated
  - Otherwise – regulated as "Former Type 2 Carrier"

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### India VoIP Regulation

- Highly regulated
- Internet telephony:
  - PC-to-PC VoIP - allowed
  - PC-to-PSTN calls outside India – allowed
  - PC-to-PSTN calls **within** India – NOT allowed
- Video communications – similar to treatment of VoIP
- Email, search, web portals – not regulated

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## ACC Annual Meeting 2010

October Boston, MA

### Calling All Countries: The VoIP Revolution is Here!

#### Panel:

Sheba Chacko – BT Global Services

Tony Oliver – Microsoft Corporation

Andrew Powell – Leap Wireless International, Inc.

## I. Agenda

- A. What is VoIP?
- B. Regulating VoIP Globally
  - 1. U.S. Framework
  - 2. EU Framework
  - 3. Asia / Pacific
- C. VoIP in a Wireless World
- D. VoIP for Global Enterprise Voice
- E. Enterprise VoIP Customers
- F. Q & A

## II. What is VoIP and why do we care?

- A. What is VoIP? = Voice over Internet Protocol
  - 1. Uses broadband Internet connectivity
  - 2. Voice stream converted to data packets and transferred
    - a) Voice stream is broken down into packets, compressed, and sent (as opposed to establishing a single, 'permanent' connection for the duration of the call)
  - 3. Reassembled and reconverted to voice stream at other end
    - a) At other end, packets are reassembled, decompressed, and converted back into a voice stream by hardware and software components, depending on the nature of the call and its final destination
- B. Why do we care?
  - 1. Functions
    - a) Take the number with you on travel
    - b) Choose your area code
    - c) Conference calling, voicemail, caller ID, call-waiting, etc. included
    - d) Uses broadband, allowing for even more functions – via software
    - e) Video conferencing
  - 2. COST!!
    - a) Some estimates of 90% savings (consumer, mainly)
    - b) Reduced long distance costs, line costs and taxes

### III. U.S. VoIP Regulatory Framework

- A. Telecommunications - Extensive regulation
  - 1. Standard telephone service, wireless, satellite and paging
- B. Information Services - Generally exempt
  - 1. Email, voicemail, video and Internet
- C. **"Interconnected VoIP"**
  - 1. Not a telecommunications service but still subject to some telecom requirements
    - a) "Interconnected VoIP" is a service which allows users to make calls to and receive calls from the PSTN over a broadband connection using customer premises equipment (phone-like device)
      - (1) 911 obligations
      - (2) Disabled access
      - (3) Law enforcement assistance
      - (4) Telecom privacy rules (CPNI)
      - (5) Number portability
      - (6) Contribution to Universal Service Fund
    - b) "Interconnected VoIP," under 47 C.F.R. § 9.3, is defined as the following:
      - (1) enables real-time, two-way voice communications;
      - (2) requires a broadband connection at the user's location;
      - (3) requires IP phone consumer premises equipment; and
      - (4) permits users to send and receive calls from the traditional public switched telephone network (PSTN).

### IV. EU VoIP Regulatory Framework

- A. Electronic communications networks
  - 1. Physical infrastructure that carries electronic communications (i.e. transmission systems) – e.g., wireless network
- B. **Electronic communications services**
  - 1. "conveyance of signals" on communications networks (specifically excluding content services)
  - 2. Interconnected VoIP
- C. Information society services
  - 1. Online Services that do not "wholly or mainly" consist of the conveyance of signals on communications networks – e.g., web site hosting
- D. EU Proposing Changes
  - 1. Interconnected VoIP allowing calls to and from the PSTN will be subject to telephony related obligations
  - 2. Emergency calling required for outbound PSTN VoIP services (calls to the PSTN)
  - 3. "Nomadic" services must provide reliable access to emergency calling
  - 4. Caller location information must be provided for VoIP services where emergency access required
  - 5. Registration/taxes possible

## 6. New accessibility obligations

**V. Asia-Pacific VoIP Regulation**

- A. Highly regulated
- B. Different services subject to different regulation
- C. Japan
  - 1. Email, search, web portals – regulated as “Former Type 2 Carrier”
  - 2. Key factor in regulation may be hosting in Japan.
  - 3. PC-to-PC VoIP
    - a) Strictly peer-to-peer communications – not regulated
    - b) Otherwise – regulated as “Former Type 2 Carrier”
- D. India
- E. Internet telephony:
- F. PC-to-PC VoIP - allowed
- G. PC-to-PSTN calls outside India – allowed
- H. PC-to-PSTN calls **within** India – NOT allowed
- I. Video communications – similar to treatment of VoIP
  - 1. Email, search, web portals – not regulated PC-to-PSTN **within** India – NOT allowed
- J. Example: China
- K. Classified as “basic” or “value added telecoms services” (VATS)
  - 1. Basic services: services relating to infrastructure and backbone facilities
  - 2. VATS: e.g., the provision of Internet access and content (which are provided over the basic telecoms infrastructure)
- L. Permits required if under either
- M. Restrictions on foreign investment
- N. Telecom permits
  - 1. Telecoms Service Operating Permit or VATS Permit required
  - 2. PSTN-interconnected VoIP
  - 3. Classified as fixed line voice communications and requires a Telecoms Service Operating Permit
  - 4. Other commercial VoIP services (PC-to-PC)
  - 5. Classified as commercial VoIP and requires a VATS Permit
  - 6. Non-commercial VoIP – not subject to licensing
- O. Email, search, web portals
  - 1. Classified as data storage and forwarding services or Internet information services and requires a VATS Permit
- P. Video communications
  - 1. Similar to treatment of VoIP and likely requires a VATS Permit

**VI. Global VoIP Regs – Key Takeaways**

- A. Other countries often more highly regulated than US
- B. “Interconnected VoIP” is generally regulated
- C. Different VoIP services regulated differently (e.g., China and India)
- D. EXAMPLES:

1. Panama VoIP is taxed
2. Guyana VoIP is prohibited
3. India retail commercial sales is allowed but only for long distance service
4. Ethiopia, the government is monopolizing telecommunication service, it is a criminal offense to offer services using VoIP. The country has installed firewalls to prevent international calls being made using VoIP. These measures were taken after a popularity in VoIP reduced the income generated by the state owned telecommunication company.
5. UAE, it is illegal to use any form of VoIP, to the extent that websites of Skype and Gizmo Project are blocked
6. Republic of Korea, only providers registered with the government are authorized to offer VoIP services. Unlike many VoIP providers, most of whom offer flat rates, Korean VoIP services are generally metered and charged at rates similar to terrestrial calling.

## VII. VoIP in a Wireless World

- A. VoIP issues for the wireless industry
  1. Long term migration to IP by carriers
    - a) Traditional being replaced by IP transmission
  2. Eventual platform for end-to-end voice service including air interface
    - a) Example: LTE VoIP transmission has no other method of delivering voice apart from VOIP transmission
- B. Advantages
  1. Guarantee quality of service end-to-end
  2. Service optimized for wireless and lower cost
    - a) Example: Avoid third-party interconnect/access charges
- C. Difficulties
  1. "Net Neutrality"
  2. VoIP application limitations
    - a) Network and bandwidth management issues
    - b) Spectrum constrained
    - c) Mobile phone limited capability to download and install mobile VoIP applications
- D. Intersection of wireless platforms, VoIP applications and Net Neutrality
- E. FCC's 2005 *Internet Policy Statement* -- Consumers are entitled to:
  1. *access lawful Internet content they choose*
  2. *run applications and use services they choose*
  3. *connect to choice of legal devices that do not harm network*
  4. *competition among network providers, application and service providers, and content managers*
  5. These principles are subject to "reasonable network management"
- F. Skype "Carterfone" Petition – pending at FCC
  1. Apply *Internet Policy Statement* and net neutrality to wireless
- G. Device Management Proceedings
  1. RCA proceeding requesting FCC to address handset exclusivity
  2. FCC and U.S. Copyright activity regarding cellphone locking

3. Recent inquiry by FCC regarding Apple-AT&T refusal to approve Google Voice VOIP application
- H. Broadband Stimulus Package
  1. Nondiscrimination and net neutrality attaches to wireless broadband infrastructure projects

## VIII. VoIP for Global Enterprise Voice

- A. Profile of a global enterprise user
  1. Wants seamless, reliable, secure VoIP
  2. Same look and feel regardless of country in which service is used
  3. Travels and wants same number and functionality
- B. But there are regulatory constraints!
  1. Absolute bans on VoIP, licensing hurdles, compliance requirements
- C. Global Enterprise VoIP Constraints
  1. Geographic Phone Numbers
    - a) Limited use outside geographic area
  2. E911 Requirements
    - a) Connection required and call location info transmitted
  3. State Security Agency Interception
  4. Data Retention
    - a) Retain VoIP calls and emails transcriptions
  5. Data Privacy
    - a) Privacy restrictions on access to recordings/transcripts outside EU or other non-compliant jurisdictions
- D. Coping with Global VoIP Constraints
  1. Check if particular use triggers regulation
    - a) Computer to computer VoIP
    - b) Closed user group VoIP
    - c) Not two-way VoIP interconnected to the PSTN
  2. Potential leeway for corporate users
    - a) Corporate users vs. residential users
    - b) Public policy may not require protection of corporate users to same extent as residential customers
  3. Self-providing VoIP customer less regulated
  4. Use PSTN / PBX for E911 compliance
    - a) Maintain PSTN line out of each customer office
    - b) Routes emergency calls over PBX to PSTN line to emergency provider answering facility
  5. Customer Consent to Store / Access Data
    - a) Permit outside jurisdiction that call was originated or terminated

## IX. Enterprise VoIP Customers

- A. Not as regulated as the provider
  1. But may not be legal to use via standard ISP
- B. E911 compliance



1. Dealing with Portability and Power
2. Understand how this impacts emergency response
- C. Law enforcement cooperation
  1. CALEA and call intercept
  2. Similar rules and regulations in the EU as well
- D. Accessibility requirements
  1. Need to address in the US, and coming in the EU
- E. VoIP as Data
  1. Privacy and data protection rules
  2. EU Data Protection rules
  3. Monitoring Issues (EU employees, etc.)
  4. EU limitations on monitoring employees when you are recording the data
  5. Recording calls
    - a) Conferencing
    - b) Unified messaging
    - c) Are notifications required?
  6. Data retention policies
  7. Litigation eDiscovery
  8. Data retained is discoverable in case of litigation (like unified messaging/voicemails)
- F. VoIP User Geolocation
  1. Location matters!
    - a) Telecom regulation
    - b) Data privacy
    - c) Taxes

## X. CLOSING COMMENTS

- A. Key Takeaways
  1. VoIP is becoming ubiquitous
  2. Global VoIP regulation is complex and growing
  3. Regulators have different reasons behind VoIP regulations
  4. Different functions regulated differently
  5. Service providers, wireless providers and customers all impacted
  6. Regulation goes beyond telecom – DATA

### Supplemental Materials

- EU Directives/Proposals
- FCC Internet Policy Statement
- Skype Wireless Device Petition
- E911 US State Regulations Synopsis
- Regulated/Not-Regulated Cheat Sheet
- Issues/Features Checklist(s)

**DIRECTIVE 2002/19/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**of 7 March 2002**

**on access to, and interconnection of, electronic communications networks and associated facilities  
(Access Directive)**

THE EUROPEAN PARLIAMENT AND THE  
COUNCIL OF THE EUROPEAN UNION,

under this Directive except where, in benefiting from access to public networks, they may be subject to conditions laid down by Member States.

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

(2) Services providing content such as the offer for sale of a package of sound or television broadcasting content are not covered by the common regulatory framework for electronic communications networks and services.

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

(3) The term 'access' has a wide range of meanings, and it is therefore necessary to define precisely how that term is used in this Directive, without prejudice to how it may be used in other Community measures. An operator may own the underlying network or facilities or may rent some or all of them.

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(3)</sup>,

Whereas:

(1) Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) <sup>(4)</sup> lays down the objectives of a regulatory framework to cover electronic communications networks and services in the Community, including fixed and mobile telecommunications networks, cable television networks, networks used for terrestrial broadcasting, satellite networks and Internet networks, whether used for voice, fax, data or images. Such networks may have been authorised by Member States under Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) <sup>(5)</sup> or have been authorised under previous regulatory measures. The provisions of this Directive apply to those networks that are used for the provision of publicly available electronic communications services. This Directive covers access and interconnection arrangements between service suppliers. Non-public networks do not have obligations

(4) Directive 95/47/EC of the European Parliament and of the Council of 24 October 1995 on the use of standards for the transmission of television signals <sup>(6)</sup> did not mandate any specific digital television transmission system or service requirement, and this opened up an opportunity for the market actors to take the initiative and develop suitable systems. Through the Digital Video Broadcasting Group, European market actors have developed a family of television transmission systems that have been adopted by broadcasters throughout the world. These transmissions systems have been standardised by the European Telecommunications Standards Institute (ETSI) and have become International Telecommunication Union recommendations. In relation to wide-screen digital television, the 16:9 aspect ratio is the reference format for wide-format television services and programmes, and is now established in Member States' markets as a result of Council Decision 93/424/EEC of 22 July 1993 on an action plan for the introduction of advanced television services in Europe <sup>(7)</sup>.

<sup>(1)</sup> OJ C 365 E, 19.12.2000, p. 215 and OJ C 270 E, 25.9.2001, p. 161.

<sup>(2)</sup> OJ C 123, 25.4.2001, p. 50.

<sup>(3)</sup> Opinion of the European Parliament of 1 March 2001 (OJ C 277, 1.10.2001, p. 72), Council Common Position of 17 September 2001 (OJ C 337, 30.11.2001, p. 1) and Decision of the European Parliament of 12 December 2001 (not yet published in the Official Journal). Council Decision of 14 February 2002.

<sup>(4)</sup> See page 33 of this Official Journal.

<sup>(5)</sup> See page 21 of this Official Journal.

<sup>(6)</sup> OJ L 281, 23.11.1995, p. 51.

<sup>(7)</sup> OJ L 196, 5.8.1993, p. 48.

- subject to the competition rules of the Treaty. In the context of achieving a more efficient, truly pan-European market, with effective competition, more choice and competitive services to consumers, undertakings which receive requests for access or interconnection should in principle conclude such agreements on a commercial basis, and negotiate in good faith.
- (6) In markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to establish a framework to ensure that the market functions effectively. National regulatory authorities should have the power to secure, where commercial negotiation fails, adequate access and interconnection and interoperability of services in the interest of end-users. In particular, they may ensure end-to-end connectivity by imposing proportionate obligations on undertakings that control access to end-users. Control of means of access may entail ownership or control of the physical link to the end-user (either fixed or mobile), and/or the ability to change or withdraw the national number or numbers needed to access an end-user's network termination point. This would be the case for example if network operators were to restrict unreasonably end-user choice for access to Internet portals and services.
- (7) National legal or administrative measures that link the terms and conditions for access or interconnection to the activities of the party seeking interconnection, and specifically to the degree of its investment in network infrastructure, and not to the interconnection or access services provided, may cause market distortion and may therefore not be compatible with competition rules.
- (8) Network operators who control access to their own customers do so on the basis of unique numbers or addresses from a published numbering or addressing range. Other network operators need to be able to deliver traffic to those customers, and so need to be able to interconnect directly or indirectly to each other. The existing rights and obligations to negotiate interconnection should therefore be maintained. It is also appropriate to maintain the obligations formerly laid down in Directive 95/47/EC requiring fully digital electronic communications networks used for the distribution of television services and open to the public to be capable of distributing wide-screen television services and programmes, so that users are able to receive such programmes in the format in which they were transmitted.
- (9) Interoperability is of benefit to end-users and is an important aim of this regulatory framework. Encouraging interoperability is one of the objectives for national regulatory authorities as set out in this framework, which also provides for the Commission to publish a list of standards and/or specifications covering the provision of services, technical interfaces and/or network functions, as the basis for encouraging harmonisation in electronic communications. Member States should encourage the use of published standards and/or specifications to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.
- (10) Competition rules alone may not be sufficient to ensure cultural diversity and media pluralism in the area of digital television. Directive 95/47/EC provided an initial regulatory framework for the nascent digital television industry which should be maintained, including in particular the obligation to provide conditional access on fair, reasonable and non-discriminatory terms, in order to make sure that a wide variety of programming and services is available. Technological and market developments make it necessary to review these obligations on a regular basis, either by a Member State for its national market or the Commission for the Community, in particular to determine whether there is justification for extending obligations to new gateways, such as electronic programme guides (EPGs) and application program interfaces (APIs), to the extent that is necessary to ensure accessibility for end-users to specified digital broadcasting services. Member States may specify the digital broadcasting services to which access by end-users must be ensured by any legislative, regulatory or administrative means that they deem necessary.
- (11) Member States may also permit their national regulatory authority to review obligations in relation to conditional access to digital broadcasting services in order to assess through a market analysis whether to withdraw or amend conditions for operators that do not have significant market power on the relevant market. Such withdrawal or amendment should not adversely affect access for end-users to such services or the prospects for effective competition.
- (12) In order to ensure continuity of existing agreements and to avoid a legal vacuum, it is necessary to ensure that obligations for access and interconnection imposed under Articles 4, 6, 7, 8, 11, 12, and 14 of Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the

principles of open network provision (ONP) <sup>(1)</sup>, obligations on special access imposed under Article 16 of Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment <sup>(2)</sup>, and obligations concerning the provision of leased line transmission capacity under Council Directive 92/44/EEC of 5 June 1992 on the application of open network provision to leased lines <sup>(3)</sup>, are initially carried over into the new regulatory framework, but are subject to immediate review in the light of prevailing market conditions. Such a review should also extend to those organisations covered by Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop <sup>(4)</sup>.

- (13) The review should be carried out using an economic market analysis based on competition law methodology. The aim is to reduce *ex ante* sector specific rules progressively as competition in the market develops. However the procedure also takes account of transitional problems in the market such as those related to international roaming and of the possibility of new bottlenecks arising as a result of technological development, which may require *ex ante* regulation, for example in the area of broadband access networks. It may well be the case that competition develops at different speeds in different market segments and in different Member States, and national regulatory authorities should be able to relax regulatory obligations in those markets where competition is delivering the desired results. In order to ensure that market players in similar circumstances are treated in similar ways in different Member States, the Commission should be able to ensure harmonised application of the provisions of this Directive. National regulatory authorities and national authorities entrusted with the implementation of competition law should, where appropriate, coordinate their actions to ensure that the most appropriate remedy is applied. The Community and its Member States have entered into commitments on interconnection of telecommunications networks in the context of the World Trade Organisation agreement on basic telecommunications and these commitments need to be respected.
- (14) Directive 97/33/EC laid down a range of obligations to be imposed on undertakings with significant market power, namely transparency, non-discrimination, accounting separation, access, and price control including cost orientation. This range of possible

obligations should be maintained but, in addition, they should be established as a set of maximum obligations that can be applied to undertakings, in order to avoid over-regulation. Exceptionally, in order to comply with international commitments or Community law, it may be appropriate to impose obligations for access or interconnection on all market players, as is currently the case for conditional access systems for digital television services.

- (15) The imposition of a specific obligation on an undertaking with significant market power does not require an additional market analysis but a justification that the obligation in question is appropriate and proportionate in relation to the nature of the problem identified.
- (16) Transparency of terms and conditions for access and interconnection, including prices, serve to speed-up negotiation, avoid disputes and give confidence to market players that a service is not being provided on discriminatory terms. Openness and transparency of technical interfaces can be particularly important in ensuring interoperability. Where a national regulatory authority imposes obligations to make information public, it may also specify the manner in which the information is to be made available, covering for example the type of publication (paper and/or electronic) and whether or not it is free of charge, taking into account the nature and purpose of the information concerned.
- (17) The principle of non-discrimination ensures that undertakings with market power do not distort competition, in particular where they are vertically integrated undertakings that supply services to undertakings with whom they compete on downstream markets.
- (18) Accounting separation allows internal price transfers to be rendered visible, and allows national regulatory authorities to check compliance with obligations for non-discrimination where applicable. In this regard the Commission published Recommendation 98/322/EC of 8 April 1998 on interconnection in a liberalised telecommunications market (Part 2 — accounting separation and cost accounting) <sup>(5)</sup>.
- (19) Mandating access to network infrastructure can be justified as a means of increasing competition, but national regulatory authorities need to balance the rights of an infrastructure owner to exploit its infrastructure for its own benefit, and the rights of other service

<sup>(1)</sup> OJ L 199, 26.7.1997, p. 32. Directive as last amended by Directive 98/61/EC (OJ L 268, 3.10.1998, p. 37).

<sup>(2)</sup> OJ L 101, 1.4.1998, p. 24.

<sup>(3)</sup> OJ L 165, 19.6.1992, p. 27. Directive as last amended by Commission Decision No 98/80/EC (OJ L 14, 20.1.1998, p. 27).

<sup>(4)</sup> OJ L 366, 30.12.2000, p. 4.

<sup>(5)</sup> OJ L 141, 13.5.1998, p. 6.

providers to access facilities that are essential for the provision of competing services. Where obligations are imposed on operators that require them to meet reasonable requests for access to and use of networks elements and associated facilities, such requests should only be refused on the basis of objective criteria such as technical feasibility or the need to maintain network integrity. Where access is refused, the aggrieved party may submit the case to the dispute resolutions procedure referred to in Articles 20 and 21 of Directive 2002/21/EC (Framework Directive). An operator with mandated access obligations cannot be required to provide types of access which are not within its powers to provide. The imposition by national regulatory authorities of mandated access that increases competition in the short-term should not reduce incentives for competitors to invest in alternative facilities that will secure more competition in the long-term. The Commission has published a Notice on the application of the competition rules to access agreements in the telecommunications sector <sup>(1)</sup> which addresses these issues. National regulatory authorities may impose technical and operational conditions on the provider and/or beneficiaries of mandated access in accordance with Community law. In particular the imposition of technical standards should comply with Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules of Information Society Services <sup>(2)</sup>.

- (20) Price control may be necessary when market analysis in a particular market reveals inefficient competition. The regulatory intervention may be relatively light, such as an obligation that prices for carrier selection are reasonable as laid down in Directive 97/33/EC, or much heavier such as an obligation that prices are cost oriented to provide full justification for those prices where competition is not sufficiently strong to prevent excessive pricing. In particular, operators with significant market power should avoid a price squeeze whereby the difference between their retail prices and the interconnection prices charged to competitors who provide similar retail services is not adequate to ensure sustainable competition. When a national regulatory authority calculates costs incurred in establishing a service mandated under this Directive, it is appropriate to allow a reasonable return on the capital employed including appropriate labour and building costs, with the value of capital adjusted where necessary to reflect the current valuation of assets and efficiency of operations. The method of cost recovery should be appropriate to the circumstances taking account of the need to promote efficiency and sustainable competition and maximise consumer benefits.
- (21) Where a national regulatory authority imposes obligations to implement a cost accounting system in order to support price controls, it may itself undertake an annual audit to ensure compliance with that cost accounting system, provided that it has the necessary qualified staff, or it may require the audit to be carried out by another qualified body, independent of the operator concerned.
- (22) Publication of information by Member States will ensure that market players and potential market entrants understand their rights and obligations, and know where to find the relevant detailed information. Publication in the national gazette helps interested parties in other Member States to find the relevant information.
- (23) In order to ensure that the pan-European electronic communications market is effective and efficient, the Commission should monitor and publish information on charges which contribute to determining prices to end-users.
- (24) The development of the electronic communications market, with its associated infrastructure, could have adverse effects on the environment and the landscape. Member States should therefore monitor this process and, if necessary, take action to minimise any such effects by means of appropriate agreements and other arrangements with the relevant authorities.
- (25) In order to determine the correct application of Community law, the Commission needs to know which undertakings have been designated as having significant market power and what obligations have been placed upon market players by national regulatory authorities. In addition to national publication of this information, it is therefore necessary for Member States to send this information to the Commission. Where Member States are required to send information to the Commission, this may be in electronic form, subject to appropriate authentication procedures being agreed.
- (26) Given the pace of technological and market developments, the implementation of this Directive

<sup>(1)</sup> OJ C 265, 22.8.1998, p. 2.

<sup>(2)</sup> OJ L 204, 21.7.1998, p. 37. Directive as amended by Directive 98/48/EC (OJ L 217, 5.8.1998, p. 18).

should be reviewed within three years of its date of application to determine if it is meeting its objectives.

once the desired objectives have been achieved. Access in this Directive does not refer to access by end-users.

(27) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission <sup>(1)</sup>.

#### Article 2

#### Definitions

(28) Since the objectives of the proposed action, namely establishing a harmonised framework for the regulation of access to and interconnection of electronic communications networks and associated facilities, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives,

For the purposes of this Directive the definitions set out in Article 2 of Directive 2002/21/EC (Framework Directive) shall apply.

The following definitions shall also apply:

- (a) 'access' means the making available of facilities and/or services, to another undertaking, under defined conditions, on either an exclusive or non-exclusive basis, for the purpose of providing electronic communications services. It covers *inter alia*: access to network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means (in particular this includes access to the local loop and to facilities and services necessary to provide services over the local loop), access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems, access to number translation or systems offering equivalent functionality, access to fixed and mobile networks, in particular for roaming, access to conditional access systems for digital television services; access to virtual network services;
- (b) 'interconnection' means the physical and logical linking of public communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another undertaking. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access implemented between public network operators;
- (c) 'operator' means an undertaking providing or authorised to provide a public communications network or an associated facility;
- (d) 'wide-screen television service' means a television service that consists wholly or partially of programmes produced and edited to be displayed in a full height wide-screen format. The 16:9 format is the reference format for wide-screen television services;
- (e) 'local loop' means the physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network.

HAVE ADOPTED THIS DIRECTIVE:

#### CHAPTER I

#### SCOPE, AIM AND DEFINITIONS

#### Article 1

#### Scope and aim

1. Within the framework set out in Directive 2002/21/EC (Framework Directive), this Directive harmonises the way in which Member States regulate access to, and interconnection of, electronic communications networks and associated facilities. The aim is to establish a regulatory framework, in accordance with internal market principles, for the relationships between suppliers of networks and services that will result in sustainable competition, interoperability of electronic communications services and consumer benefits.

2. This Directive establishes rights and obligations for operators and for undertakings seeking interconnection and/or access to their networks or associated facilities. It sets out objectives for national regulatory authorities with regard to access and interconnection, and lays down procedures to ensure that obligations imposed by national regulatory authorities are reviewed and, where appropriate, withdrawn

<sup>(1)</sup> OJ L 184, 17.7.1999, p. 23.

## CHAPTER II

## GENERAL PROVISIONS

## Article 3

**General framework for access and interconnection**

1. Member States shall ensure that there are no restrictions which prevent undertakings in the same Member State or in different Member States from negotiating between themselves agreements on technical and commercial arrangements for access and/or interconnection, in accordance with Community law. The undertaking requesting access or interconnection does not need to be authorised to operate in the Member State where access or interconnection is requested, if it is not providing services and does not operate a network in that Member State.

2. Without prejudice to Article 31 of Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) <sup>(1)</sup>, Member States shall not maintain legal or administrative measures which oblige operators, when granting access or interconnection, to offer different terms and conditions to different undertakings for equivalent services and/or imposing obligations that are not related to the actual access and interconnection services provided without prejudice to the conditions fixed in the Annex of Directive 2002/20/EC (Authorisation Directive).

## Article 4

**Rights and obligations for undertakings**

1. Operators of public communications networks shall have a right and, when requested by other undertakings so authorised, an obligation to negotiate interconnection with each other for the purpose of providing publicly available electronic communications services, in order to ensure provision and interoperability of services throughout the Community. Operators shall offer access and interconnection to other undertakings on terms and conditions consistent with obligations imposed by the national regulatory authority pursuant to Articles 5, 6, 7 and 8.

2. Public electronic communications networks established for the distribution of digital television services shall be capable of distributing wide-screen television services and programmes. Network operators that receive and redistribute wide-screen television services or programmes shall maintain that wide-screen format.

3. Without prejudice to Article 11 of Directive 2002/20/EC (Authorisation Directive), Member States shall require that undertakings which acquire information from another undertaking before, during or after the process of negotiating

<sup>(1)</sup> See page 51 of this Official Journal.

access or interconnection arrangements use that information solely for the purpose for which it was supplied and respect at all times the confidentiality of information transmitted or stored. The received information shall not be passed on to any other party, in particular other departments, subsidiaries or partners, for whom such information could provide a competitive advantage.

## Article 5

**Powers and responsibilities of the national regulatory authorities with regard to access and interconnection**

1. National regulatory authorities shall, acting in pursuit of the objectives set out in Article 8 of Directive 2002/21/EC (Framework Directive), encourage and where appropriate ensure, in accordance with the provisions of this Directive, adequate access and interconnection, and interoperability of services, exercising their responsibility in a way that promotes efficiency, sustainable competition, and gives the maximum benefit to end-users.

In particular, without prejudice to measures that may be taken regarding undertakings with significant market power in accordance with Article 8, national regulatory authorities shall be able to impose:

- (a) to the extent that is necessary to ensure end-to-end connectivity, obligations on undertakings that control access to end-users, including in justified cases the obligation to interconnect their networks where this is not already the case;
- (b) to the extent that is necessary to ensure accessibility for end-users to digital radio and television broadcasting services specified by the Member State, obligations on operators to provide access to the other facilities referred to in Annex I, Part II on fair, reasonable and non-discriminatory terms.

2. When imposing obligations on an operator to provide access in accordance with Article 12, national regulatory authorities may lay down technical or operational conditions to be met by the provider and/or beneficiaries of such access, in accordance with Community law, where necessary to ensure normal operation of the network. Conditions that refer to implementation of specific technical standards or specifications shall respect Article 17 of Directive 2002/21/EC (Framework Directive).

3. Obligations and conditions imposed in accordance with paragraphs 1 and 2 shall be objective, transparent, proportionate and non-discriminatory, and shall be implemented in accordance with the procedures referred to in Articles 6 and 7 of Directive 2002/21/EC (Framework Directive).

4. With regard to access and interconnection, Member States shall ensure that the national regulatory authority is empowered to intervene at its own initiative where justified or, in the absence of agreement between undertakings, at the request of either of the parties involved, in order to secure the policy objectives of Article 8 of Directive 2002/21/EC (Framework Directive), in accordance with the provisions of this Directive and the procedures referred to in Articles 6 and 7, 20 and 21 of Directive 2002/21/EC (Framework Directive).

### CHAPTER III

#### OBLIGATIONS ON OPERATORS AND MARKET REVIEW PROCEDURES

##### Article 6

#### Conditional access systems and other facilities

1. Member States shall ensure that, in relation to conditional access to digital television and radio services broadcast to viewers and listeners in the Community, irrespective of the means of transmission, the conditions laid down in Annex I, Part I apply.

2. In the light of market and technological developments, Annex I may be amended in accordance with the procedure referred to in Article 14(3).

3. Notwithstanding the provisions of paragraph 1, Member States may permit their national regulatory authority, as soon as possible after the entry into force of this Directive and periodically thereafter, to review the conditions applied in accordance with this Article, by undertaking a market analysis in accordance with the first paragraph of Article 16 of Directive 2002/21/EC (Framework Directive) to determine whether to maintain, amend or withdraw the conditions applied.

Where, as a result of this market analysis, a national regulatory authority finds that one or more operators do not have significant market power on the relevant market, it may amend or withdraw the conditions with respect to those operators, in accordance with the procedures referred to in Articles 6 and 7 of Directive 2002/21/EC (Framework Directive), only to the extent that:

- (a) accessibility for end-users to radio and television broadcasts and broadcasting channels and services specified in accordance with Article 31 of Directive 2002/22/EC (Universal Service Directive) would not be adversely affected by such amendment or withdrawal, and
- (b) the prospects for effective competition in the markets for:
  - (i) retail digital television and radio broadcasting services, and

(ii) conditional access systems and other associated facilities,

would not be adversely affected by such amendment or withdrawal.

An appropriate period of notice shall be given to parties affected by such amendment or withdrawal of conditions.

4. Conditions applied in accordance with this Article are without prejudice to the ability of Member States to impose obligations in relation to the presentational aspect of electronic programme guides and similar listing and navigation facilities.

##### Article 7

#### Review of former obligations for access and interconnection

1. Member States shall maintain all obligations on undertakings providing public communications networks and/or services concerning access and interconnection that were in force prior to the date of entry into force of this Directive under Articles 4, 6, 7, 8, 11, 12, and 14 of Directive 97/33/EC, Article 16 of Directive 98/10/EC, and Articles 7 and 8 of Directive 92/44/EC, until such time as these obligations have been reviewed and a determination made in accordance with paragraph 3.

2. The Commission will indicate relevant markets for the obligations referred to in paragraph 1 in the initial recommendation on relevant product and service markets and the Decision identifying transnational markets to be adopted in accordance with Article 15 of Directive 2002/21/EC (Framework Directive).

3. Member States shall ensure that, as soon as possible after the entry into force of this Directive, and periodically thereafter, national regulatory authorities undertake a market analysis, in accordance with Article 16 of Directive 2002/21/EC (Framework Directive) to determine whether to maintain, amend or withdraw these obligations. An appropriate period of notice shall be given to parties affected by such amendment or withdrawal of obligations.

##### Article 8

#### Imposition, amendment or withdrawal of obligations

1. Member States shall ensure that national regulatory authorities are empowered to impose the obligations identified in Articles 9 to 13.

2. Where an operator is designated as having significant market power on a specific market as a result of a market analysis carried out in accordance with Article 16 of Directive 2002/21/EC (Framework Directive), national regulatory



authorities shall impose the obligations set out in Articles 9 to 13 of this Directive as appropriate.

3. Without prejudice to:

- the provisions of Articles 5(1), 5(2) and 6,
- the provisions of Articles 12 and 13 of Directive 2002/21/EC (Framework Directive), Condition 7 in Part B of the Annex to Directive 2002/20/EC (Authorisation Directive) as applied by virtue of Article 6(1) of that Directive, Articles 27, 28 and 30 of Directive 2002/22/EC (Universal Service Directive) and the relevant provisions of Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector<sup>(1)</sup> containing obligations on undertakings other than those designated as having significant market power, or
- the need to comply with international commitments,

national regulatory authorities shall not impose the obligations set out in Articles 9 to 13 on operators that have not been designated in accordance with paragraph 2.

In exceptional circumstances, when a national regulatory authority intends to impose on operators with significant market power other obligations for access or interconnection than those set out in Articles 9 to 13 in this Directive it shall submit this request to the Commission. The Commission, acting in accordance with Article 14(2), shall take a decision authorising or preventing the national regulatory authority from taking such measures.

4. Obligations imposed in accordance with this Article shall be based on the nature of the problem identified, proportionate and justified in the light of the objectives laid down in Article 8 of Directive 2002/21/EC (Framework Directive). Such obligations shall only be imposed following consultation in accordance with Articles 6 and 7 of that Directive.

5. In relation to the third indent of the first subparagraph of paragraph 3, national regulatory authorities shall notify decisions to impose, amend or withdraw obligations on market players to the Commission, in accordance with the procedure referred to in Article 7 of Directive 2002/21/EC (Framework Directive).

#### Article 9

##### Obligation of transparency

1. National regulatory authorities may, in accordance with the provisions of Article 8, impose obligations for

<sup>(1)</sup> OJ L 24, 30.1.1998, p. 1.

transparency in relation to interconnection and/or access, requiring operators to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices.

2. In particular where an operator has obligations of non-discrimination, national regulatory authorities may require that operator to publish a reference offer, which shall be sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested, giving a description of the relevant offerings broken down into components according to market needs, and the associated terms and conditions including prices. The national regulatory authority shall, *inter alia*, be able to impose changes to reference offers to give effect to obligations imposed under this Directive.

3. National regulatory authorities may specify the precise information to be made available, the level of detail required and the manner of publication.

4. Notwithstanding paragraph 3, where an operator has obligations under Article 12 concerning unbundled access to the twisted metallic pair local loop, national regulatory authorities shall ensure the publication of a reference offer containing at least the elements set out in Annex II.

5. In the light of market and technological developments, Annex II may be amended in accordance with the procedure referred to in Article 14(3).

#### Article 10

##### Obligation of non-discrimination

1. A national regulatory authority may, in accordance with the provisions of Article 8, impose obligations of non-discrimination, in relation to interconnection and/or access.

2. Obligations of non-discrimination shall ensure, in particular, that the operator applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.

#### Article 11

##### Obligation of accounting separation

1. A national regulatory authority may, in accordance with the provisions of Article 8, impose obligations for accounting separation in relation to specified activities related to interconnection and/or access.

In particular, a national regulatory authority may require a vertically integrated company to make transparent its wholesale prices and its internal transfer prices *inter alia* to ensure compliance where there is a requirement for non-discrimination under Article 10 or, where necessary, to prevent unfair cross-subsidy. National regulatory authorities may specify the format and accounting methodology to be used.

2. Without prejudice to Article 5 of Directive 2002/21/EC (Framework Directive), to facilitate the verification of compliance with obligations of transparency and non-discrimination, national regulatory authorities shall have the power to require that accounting records, including data on revenues received from third parties, are provided on request. National regulatory authorities may publish such information as would contribute to an open and competitive market, while respecting national and Community rules on commercial confidentiality.

#### Article 12

#### Obligations of access to, and use of, specific network facilities

1. A national regulatory authority may, in accordance with the provisions of Article 8, impose obligations on operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, *inter alia* in situations where the national regulatory authority considers that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end-user's interest.

Operators may be required *inter alia*:

- (a) to give third parties access to specified network elements and/or facilities, including unbundled access to the local loop;
- (b) to negotiate in good faith with undertakings requesting access;
- (c) not to withdraw access to facilities already granted;
- (d) to provide specified services on a wholesale basis for resale by third parties;
- (e) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;

- (f) to provide co-location or other forms of facility sharing, including duct, building or mast sharing;
- (g) to provide specified services needed to ensure interoperability of end-to-end services to users, including facilities for intelligent network services or roaming on mobile networks;
- (h) to provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services;
- (i) to interconnect networks or network facilities.

National regulatory authorities may attach to those obligations conditions covering fairness, reasonableness and timeliness.

2. When national regulatory authorities are considering whether to impose the obligations referred in paragraph 1, and in particular when assessing whether such obligations would be proportionate to the objectives set out in Article 8 of Directive 2002/21/EC (Framework Directive), they shall take account in particular of the following factors:

- (a) the technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved;
- (b) the feasibility of providing the access proposed, in relation to the capacity available;
- (c) the initial investment by the facility owner, bearing in mind the risks involved in making the investment;
- (d) the need to safeguard competition in the long term;
- (e) where appropriate, any relevant intellectual property rights;
- (f) the provision of pan-European services.

#### Article 13

#### Price control and cost accounting obligations

1. A national regulatory authority may, in accordance with the provisions of Article 8, impose obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of interconnection and/or access, in situations where a market analysis indicates that a lack of effective competition means

that the operator concerned might sustain prices at an excessively high level, or apply a price squeeze, to the detriment of end-users. National regulatory authorities shall take into account the investment made by the operator and allow him a reasonable rate of return on adequate capital employed, taking into account the risks involved.

2. National regulatory authorities shall ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard national regulatory authorities may also take account of prices available in comparable competitive markets.

3. Where an operator has an obligation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs including a reasonable rate of return on investment shall lie with the operator concerned. For the purpose of calculating the cost of efficient provision of services, national regulatory authorities may use cost accounting methods independent of those used by the undertaking. National regulatory authorities may require an operator to provide full justification for its prices, and may, where appropriate, require prices to be adjusted.

4. National regulatory authorities shall ensure that, where implementation of a cost accounting system is mandated in order to support price controls, a description of the cost accounting system is made publicly available, showing at least the main categories under which costs are grouped and the rules used for the allocation of costs. Compliance with the cost accounting system shall be verified by a qualified independent body. A statement concerning compliance shall be published annually.

#### CHAPTER IV

#### PROCEDURAL PROVISIONS

##### Article 14

#### Committee

1. The Commission shall be assisted by the Communications Committee set up by Article 22 of Directive 2002/21/EC (Framework Directive).

2. Where reference is made to this paragraph, Articles 3 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

3. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

4. The Committee shall adopt its rules of procedure.

##### Article 15

#### Publication of, and access to, information

1. Member States shall ensure that the specific obligations imposed on undertakings under this Directive are published and that the specific product/service and geographical markets are identified. They shall ensure that up-to-date information, provided that the information is not confidential and, in particular, does not comprise business secrets, is made publicly available in a manner that guarantees all interested parties easy access to that information.

2. Member States shall send to the Commission a copy of all such information published. The Commission shall make this information available in a readily accessible form, and shall distribute the information to the Communications Committee as appropriate.

##### Article 16

#### Notification

1. Member States shall notify to the Commission by at the latest the date of application referred to in Article 18(1) second subparagraph the national regulatory authorities responsible for the tasks set out in this Directive.

2. National regulatory authorities shall notify to the Commission the names of operators deemed to have significant market power for the purposes of this Directive, and the obligations imposed upon them under this Directive. Any changes affecting the obligations imposed upon undertakings or of the undertakings affected under the provisions of this Directive shall be notified to the Commission without delay.

##### Article 17

#### Review procedures

The Commission shall periodically review the functioning of this Directive and report to the European Parliament and to the Council, on the first occasion not later than three years after the date of application referred to in Article 18(1), second subparagraph. For this purpose, the Commission may request from the Member States information, which shall be supplied without undue delay.

##### Article 18

#### Transposition

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive by not later than 24 July 2003. They shall forthwith inform the Commission thereof.

They shall apply those measures from 25 July 2003.

When Member States adopt these measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field governed by this Directive and of any subsequent amendments to those provisions.

*Article 19*

**Entry into force**

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

*Article 20*

**Addressees**

This Directive is addressed to the Member States.

Done at Brussels, 7 March 2002.

*For the European Parliament*

*The President*

P. COX

*For the Council*

*The President*

J. C. APARICIO

## ANNEX I

**CONDITIONS FOR ACCESS TO DIGITAL TELEVISION AND RADIO SERVICES BROADCAST TO VIEWERS AND LISTENERS IN THE COMMUNITY****Part I: Conditions for conditional access systems to be applied in accordance with Article 6(1)**

In relation to conditional access to digital television and radio services broadcast to viewers and listeners in the Community, irrespective of the means of transmission, Member States must ensure in accordance with Article 6 that the following conditions apply:

- (a) conditional access systems operated on the market in the Community are to have the necessary technical capability for cost-effective transcontrol allowing the possibility for full control by network operators at local or regional level of the services using such conditional access systems;
- (b) all operators of conditional access services, irrespective of the means of transmission, who provide access services to digital television and radio services and whose access services broadcasters depend on to reach any group of potential viewers or listeners are to:
  - offer to all broadcasters, on a fair, reasonable and non-discriminatory basis compatible with Community competition law, technical services enabling the broadcasters' digitally-transmitted services to be received by viewers or listeners authorised by means of decoders administered by the service operators, and comply with Community competition law,
  - keep separate financial accounts regarding their activity as conditional access providers.
- (c) when granting licences to manufacturers of consumer equipment, holders of industrial property rights to conditional access products and systems are to ensure that this is done on fair, reasonable and non-discriminatory terms. Taking into account technical and commercial factors, holders of rights are not to subject the granting of licences to conditions prohibiting, deterring or discouraging the inclusion in the same product of:
  - a common interface allowing connection with several other access systems, or
  - means specific to another access system, provided that the licensee complies with the relevant and reasonable conditions ensuring, as far as he is concerned, the security of transactions of conditional access system operators.

**Part II: Other facilities to which conditions may be applied under Article 5(1)(b)**

- (a) Access to application program interfaces (APIs);
  - (b) Access to electronic programme guides (EPGs).
-

## ANNEX II

**MINIMUM LIST OF ITEMS TO BE INCLUDED IN A REFERENCE OFFER FOR UNBUNDLED ACCESS TO THE TWISTED METALLIC PAIR LOCAL LOOP TO BE PUBLISHED BY NOTIFIED OPERATORS**

For the purposes of this Annex the following definitions apply:

- (a) 'local sub-loop' means a partial local loop connecting the network termination point at the subscriber's premises to a concentration point or a specified intermediate access point in the fixed public telephone network;
- (b) 'unbundled access to the local loop' means full unbundled access to the local loop and shared access to the local loop; it does not entail a change in ownership of the local loop;
- (c) 'full unbundled access to the local loop' means the provision to a beneficiary of access to the local loop or local sub-loop of the notified operator authorising the use of the full frequency spectrum of the twisted metallic pair;
- (d) 'shared access to the local loop' means the provision to a beneficiary of access to the local loop or local sub-loop of the notified operator, authorising the use of the non-voice band frequency spectrum of the twisted metallic pair; the local loop continues to be used by the notified operator to provide the telephone service to the public;

**A. Conditions for unbundled access to the local loop**

- 1. Network elements to which access is offered covering in particular the following elements:
  - (a) access to local loops;
  - (b) access to non-voice band frequency spectrum of a local loop, in the case of shared access to the local loop;
- 2. Information concerning the locations of physical access sites <sup>(1)</sup>, availability of local loops in specific parts of the access network;
- 3. Technical conditions related to access and use of local loops, including the technical characteristics of the twisted metallic pair in the local loop;
- 4. Ordering and provisioning procedures, usage restrictions.

**B. Co-location services**

- 1. Information on the notified operator's relevant sites <sup>(1)</sup>.
- 2. Co-location options at the sites indicated under point 1 (including physical co-location and, as appropriate, distant co-location and virtual co-location).
- 3. Equipment characteristics: restrictions, if any, on equipment that can be co-located.
- 4. Security issues: measures put in place by notified operators to ensure the security of their locations.
- 5. Access conditions for staff of competitive operators.
- 6. Safety standards.
- 7. Rules for the allocation of space where co-location space is limited.
- 8. Conditions for beneficiaries to inspect the locations at which physical co-location is available, or sites where co-location has been refused on grounds of lack of capacity.

<sup>(1)</sup> Availability of this information may be restricted to interested parties only, in order to avoid public security concerns.

**C. Information systems**

Conditions for access to notified operator's operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing.

**D. Supply conditions**

1. Lead time for responding to requests for supply of services and facilities; service level agreements, fault resolution, procedures to return to a normal level of service and quality of service parameters.
  2. Standard contract terms, including, where appropriate, compensation provided for failure to meet lead times.
  3. Prices or pricing formulae for each feature, function and facility listed above.
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**DIRECTIVE 2002/20/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL****of 7 March 2002****on the authorisation of electronic communications networks and services  
(Authorisation Directive)**

THE EUROPEAN PARLIAMENT AND THE  
COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European  
Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social  
Committee <sup>(2)</sup>,

Acting in accordance with the procedure laid down in Article  
251 of the Treaty <sup>(3)</sup>,

Whereas:

- (1) The outcome of the public consultation on the 1999 review of the regulatory framework for electronic communications, as reflected in the Commission communication of 26 April 2000, and the findings reported by the Commission in its communications on the fifth and sixth reports on the implementation of the telecommunications regulatory package, has confirmed the need for a more harmonised and less onerous market access regulation for electronic communications networks and services throughout the Community.
- (2) Convergence between different electronic communications networks and services and their technologies requires the establishment of an authorisation system covering all comparable services in a similar way regardless of the technologies used.
- (3) The objective of this Directive is to create a legal framework to ensure the freedom to provide electronic communications networks and services, subject only to the conditions laid down in this Directive and to any restrictions in conformity with Article 46(1) of the Treaty, in particular measures regarding public policy, public security and public health.
- (4) This Directive covers authorisation of all electronic communications networks and services whether they are provided to the public or not. This is important to ensure that both categories of providers may benefit

from objective, transparent, non-discriminatory and proportionate rights, conditions and procedures.

- (5) This Directive only applies to the granting of rights to use radio frequencies where such use involves the provision of an electronic communications network or service, normally for remuneration. The self-use of radio terminal equipment, based on the non-exclusive use of specific radio frequencies by a user and not related to an economic activity, such as use of a citizen's band by radio amateurs, does not consist of the provision of an electronic communications network or service and is therefore not covered by this Directive. Such use is covered by the Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity <sup>(4)</sup>.
- (6) Provisions regarding the free movement of conditional access systems and the free provision of protected services based on such systems are laid down in Directive 98/84/EC of the European Parliament and of the Council of 20 November 1998 on the legal protection of services based on, or consisting of, conditional access <sup>(5)</sup>. The authorisation of such systems and services therefore does not need to be covered by this Directive.
- (7) The least onerous authorisation system possible should be used to allow the provision of electronic communications networks and services in order to stimulate the development of new electronic communications services and pan-European communications networks and services and to allow service providers and consumers to benefit from the economies of scale of the single market.
- (8) Those aims can be best achieved by general authorisation of all electronic communications networks and services without requiring any explicit decision or administrative act by the national regulatory authority and by limiting any procedural requirements to notification only. Where Member States require notification by providers of electronic communication networks or services when they start their activities,

<sup>(1)</sup> OJ C 365 E, 19.12.2000, p. 230 and OJ C 270 E, 25.9.2001, p. 182.

<sup>(2)</sup> OJ C 123, 25.4.2001, p. 55.

<sup>(3)</sup> Opinion of the European Parliament of 1 March 2001 (OJ C 277, 1.10.2001, p. 116), Council Common Position of 17 September 2001 (OJ C 337, 30.11.2001, p. 18) and Decision of the European Parliament of 12 December 2001 (not yet published in the Official Journal). Council Decision of 14 February 2002.

<sup>(4)</sup> OJ L 91, 7.4.1999, p. 10.

<sup>(5)</sup> OJ L 320, 28.11.1998, p. 54.



they may also require proof of such notification having been made by means of any legally recognised postal or electronic acknowledgement of receipt of the notification. Such acknowledgement should in any case not consist of or require an administrative act by the national regulatory authority to which the notification must be made.

- (9) It is necessary to include the rights and obligations of undertakings under general authorisations explicitly in such authorisations in order to ensure a level playing field throughout the Community and to facilitate cross-border negotiation of interconnection between public communications networks.
- (10) The general authorisation entitles undertakings providing electronic communications networks and services to the public to negotiate interconnection under the conditions of Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communication networks and associated facilities (Access Directive) <sup>(1)</sup>. Undertakings providing electronic communications networks and services other than to the public can negotiate interconnection on commercial terms.
- (11) The granting of specific rights may continue to be necessary for the use of radio frequencies and numbers, including short codes, from the national numbering plan. Rights to numbers may also be allocated from a European numbering plan, including for example the virtual country code '3883' which has been attributed to member countries of the European Conference of Post and Telecommunications (CEPT). Those rights of use should not be restricted except where this is unavoidable in view of the scarcity of radio frequencies and the need to ensure the efficient use thereof.
- (12) This Directive does not prejudice whether radio frequencies are assigned directly to providers of electronic communication networks or services or to entities that use these networks or services. Such entities may be radio or television broadcast content providers. Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use for radio frequencies to providers of radio or television broadcast content services, to pursue general interest objectives in conformity with Community law, the procedure for assignment of radio frequencies should in any event be objective, transparent, non-discriminatory and proportionate. In accordance with case law of the Court of Justice, any national restrictions on the rights guaranteed by Article 49 of the Treaty should be

objectively justified, proportionate and not exceed what is necessary to achieve general interest objectives as defined by Member States in conformity with Community law. The responsibility for compliance with the conditions attached to the right to use a radio frequency and the relevant conditions attached to the general authorisation should in any case lie with the undertaking to whom the right of use for the radio frequency has been granted.

- (13) As part of the application procedure for granting rights to use a radio frequency, Member States may verify whether the applicant will be able to comply with the conditions attached to such rights. For this purpose the applicant may be requested to submit the necessary information to prove his ability to comply with these conditions. Where such information is not provided, the application for the right to use a radio frequency may be rejected.
- (14) Member States are neither obliged to grant nor prevented from granting rights to use numbers from the national numbering plan or rights to install facilities to undertakings other than providers of electronic communications networks or services.
- (15) The conditions, which may be attached to the general authorisation and to the specific rights of use, should be limited to what is strictly necessary to ensure compliance with requirements and obligations under Community law and national law in accordance with Community law.
- (16) In the case of electronic communications networks and services not provided to the public it is appropriate to impose fewer and lighter conditions than are justified for electronic communications networks and services provided to the public.
- (17) Specific obligations which may be imposed on providers of electronic communications networks and services in accordance with Community law by virtue of their significant market power as defined in Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) <sup>(2)</sup> should be imposed separately from the general rights and obligations under the general authorisation.
- (18) The general authorisation should only contain conditions which are specific to the electronic communications sector. It should not be made subject

<sup>(1)</sup> See page 7 of this Official Journal.

<sup>(2)</sup> See page 33 of this Official Journal.

- to conditions which are already applicable by virtue of other existing national law which is not specific to the electronic communications sector. Nevertheless, the national regulatory authorities may inform network operators and service providers about other legislation concerning their business, for instance through references on their websites.
- (19) The requirement to publish decisions on the granting of rights to use frequencies or numbers may be fulfilled by making these decisions publicly accessible via a website.
- (20) The same undertaking, for example a cable operator, can offer both an electronic communications service, such as the conveyance of television signals, and services not covered under this Directive, such as the commercialisation of an offer of sound or television broadcasting content services, and therefore additional obligations can be imposed on this undertaking in relation to its activity as a content provider or distributor, according to provisions other than those of this Directive, without prejudice to the list of conditions laid in the Annex to this Directive.
- (21) When granting rights of use for radio frequencies, numbers or rights to install facilities, the relevant authorities may inform the undertakings to whom they grant such rights of the relevant conditions in the general authorisation.
- (22) Where the demand for radio frequencies in a specific range exceeds their availability, appropriate and transparent procedures should be followed for the assignment of such frequencies in order to avoid any discrimination and optimise use of those scarce resources.
- (23) National regulatory authorities should ensure, in establishing criteria for competitive or comparative selection procedures, that the objectives in Article 8 of Directive 2002/21/EC (Framework Directive) are met. It would therefore not be contrary to this Directive if the application of objective, non-discriminatory and proportionate selection criteria to promote the development of competition would have the effect of excluding certain undertakings from a competitive or comparative selection procedure for a particular radio frequency.
- (24) Where the harmonised assignment of radio frequencies to particular undertakings has been agreed at European level, Member States should strictly implement such agreements in the granting of rights of use of radio frequencies from the national frequency usage plan.
- (25) Providers of electronic communications networks and services may need a confirmation of their rights under the general authorisation with respect to interconnection and rights of way, in particular to facilitate negotiations with other, regional or local, levels of government or with service providers in other Member States. For this purpose the national regulatory authorities should provide declarations to undertakings either upon request or alternatively as an automatic response to a notification under the general authorisation. Such declarations should not by themselves constitute entitlements to rights nor should any rights under the general authorisation or rights of use or the exercise of such rights depend upon a declaration.
- (26) Where undertakings find that their applications for rights to install facilities have not been dealt with in accordance with the principles set out in Directive 2002/21/EC (Framework Directive) or where such decisions are unduly delayed, they should have the right to appeal against decisions or delays in such decisions in accordance with that Directive.
- (27) The penalties for non-compliance with conditions under the general authorisation should be commensurate with the infringement. Save in exceptional circumstances, it would not be proportionate to suspend or withdraw the right to provide electronic communications services or the right to use radio frequencies or numbers where an undertaking did not comply with one or more of the conditions under the general authorisation. This is without prejudice to urgent measures which the relevant authorities of the Member States may need to take in case of serious threats to public safety, security or health or to economic and operational interests of other undertakings. This Directive should also be without prejudice to any claims between undertakings for compensation for damages under national law.
- (28) Subjecting service providers to reporting and information obligations can be cumbersome, both for the undertaking and for the national regulatory authority concerned. Such obligations should therefore be proportionate, objectively justified and limited to what is strictly necessary. It is not necessary to require systematic and regular proof of compliance with all conditions under the general authorisation or attached to rights of use. Undertakings have a right to know the purposes for which the information they should provide will be used. The provision of information should not be a condition for market access. For statistical purposes a notification may be required from providers of electronic communication networks or services when they cease activities.

- (29) This Directive should be without prejudice to Member States' obligations to provide any information necessary for the defence of Community interests within the context of international agreements. This Directive should also be without prejudice to any reporting obligations under legislation which is not specific to the electronic communications sector such as competition law.
- (30) Administrative charges may be imposed on providers of electronic communications services in order to finance the activities of the national regulatory authority in managing the authorisation system and for the granting of rights of use. Such charges should be limited to cover the actual administrative costs for those activities. For this purpose transparency should be created in the income and expenditure of national regulatory authorities by means of annual reporting about the total sum of charges collected and the administrative costs incurred. This will allow undertakings to verify that administrative costs and charges are in balance.
- (31) Systems for administrative charges should not distort competition or create barriers for entry into the market. With a general authorisation system it will no longer be possible to attribute administrative costs and hence charges to individual undertakings except for the granting of rights to use numbers, radio frequencies and for rights to install facilities. Any applicable administrative charges should be in line with the principles of a general authorisation system. An example of a fair, simple and transparent alternative for these charge attribution criteria could be a turnover related distribution key. Where administrative charges are very low, flat rate charges, or charges combining a flat rate basis with a turnover related element could also be appropriate.
- (32) In addition to administrative charges, usage fees may be levied for the use of radio frequencies and numbers as an instrument to ensure the optimal use of such resources. Such fees should not hinder the development of innovative services and competition in the market. This Directive is without prejudice to the purpose for which fees for rights of use are employed. Such fees may for instance be used to finance activities of national regulatory authorities that cannot be covered by administrative charges. Where, in the case of competitive or comparative selection procedures, fees for rights of use for radio frequencies consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio frequencies. The Commission may publish on a regular basis benchmark studies with regard to best practices for the assignment of radio frequencies, the assignment of numbers or the granting of rights of way.
- (33) Member States may need to amend rights, conditions, procedures, charges and fees relating to general authorisations and rights of use where this is objectively justified. Such changes should be duly notified to all interested parties in good time, giving them adequate opportunity to express their views on any such amendments.
- (34) The objective of transparency requires that service providers, consumers and other interested parties have easy access to any information regarding rights, conditions, procedures, charges, fees and decisions concerning the provision of electronic communications services, rights of use of radio frequencies and numbers, rights to install facilities, national frequency usage plans and national numbering plans. The national regulatory authorities have an important task in providing such information and keeping it up to date. Where such rights are administered by other levels of government the national regulatory authorities should endeavour to create a user-friendly instrument for access to information regarding such rights.
- (35) The proper functioning of the single market on the basis of the national authorisation regimes under this Directive should be monitored by the Commission.
- (36) In order to arrive at a single date of application of all elements of the new regulatory framework for the electronic communications sector, it is important that the process of national transposition of this Directive and of alignment of the existing licences with the new rules take place in parallel. However, in specific cases where the replacement of authorisations existing on the date of entry into force of this Directive by the general authorisation and the individual rights of use in accordance with this Directive would lead to an increase in the obligations for service providers operating under an existing authorisation or to a reduction of their rights, Member States may avail themselves of an additional nine months after the date of application of this Directive for alignment of such licences, unless this would have a negative effect on the rights and obligations of other undertakings.
- (37) There may be circumstances under which the abolition of an authorisation condition regarding access to electronic communications networks would create serious hardship for one or more undertakings that have benefited from the condition. In such cases further transitional arrangements may be granted by the Commission, upon request by a Member State.

(38) Since the objectives of the proposed action, namely the harmonisation and simplification of electronic communications rules and conditions for the authorisation of networks and services cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary for those objectives,

the conditions set out in this Directive. To this end, Member States shall not prevent an undertaking from providing electronic communications networks or services, except where this is necessary for the reasons set out in Article 46(1) of the Treaty.

2. The provision of electronic communications networks or the provision of electronic communications services may, without prejudice to the specific obligations referred to in Article 6(2) or rights of use referred to in Article 5, only be subject to a general authorisation. The undertaking concerned may be required to submit a notification but may not be required to obtain an explicit decision or any other administrative act by the national regulatory authority before exercising the rights stemming from the authorisation. Upon notification, when required, an undertaking may begin activity, where necessary subject to the provisions on rights of use in Articles 5, 6 and 7.

3. The notification referred to in paragraph 2 shall not entail more than a declaration by a legal or natural person to the national regulatory authority of the intention to commence the provision of electronic communication networks or services and the submission of the minimal information which is required to allow the national regulatory authority to keep a register or list of providers of electronic communications networks and services. This information must be limited to what is necessary for the identification of the provider, such as company registration numbers, and the provider's contact persons, the provider's address, a short description of the network or service, and an estimated date for starting the activity.

HAVE ADOPTED THIS DIRECTIVE:

#### Article 1

### Objective and scope

1. The aim of this Directive is to implement an internal market in electronic communications networks and services through the harmonisation and simplification of authorisation rules and conditions in order to facilitate their provision throughout the Community.

2. This Directive shall apply to authorisations for the provision of electronic communications networks and services.

#### Article 2

### Definitions

1. For the purposes of this Directive, the definitions set out in Article 2 of Directive 2002/21/EC (Framework Directive) shall apply.

2. The following definitions shall also apply:

- (a) 'general authorisation' means a legal framework established by the Member State ensuring rights for the provision of electronic communications networks or services and laying down sector specific obligations that may apply to all or to specific types of electronic communications networks and services, in accordance with this Directive;
- (b) 'harmful interference' means interference which endangers the functioning of a radionavigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the applicable Community or national regulations.

#### Article 3

### General authorisation of electronic communications networks and services

1. Member States shall ensure the freedom to provide electronic communications networks and services, subject to

#### Article 4

### Minimum list of rights derived from the general authorisation

1. Undertakings authorised pursuant to Article 3, shall have the right to:

- (a) provide electronic communications networks and services;
- (b) have their application for the necessary rights to install facilities considered in accordance with Article 11 of Directive 2002/21/EC (Framework Directive).

2. When such undertakings provide electronic communications networks or services to the public the general authorisation shall also give them the right to:

- (a) negotiate interconnection with and where applicable obtain access to or interconnection from other providers of

publicly available communications networks and services covered by a general authorisation anywhere in the Community under the conditions of and in accordance with Directive 2002/19/EC (Access Directive);

- (b) be given an opportunity to be designated to provide different elements of a universal service and/or to cover different parts of the national territory in accordance with Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) <sup>(1)</sup>.

#### Article 5

### Rights of use for radio frequencies and numbers

1. Member States shall, where possible, in particular where the risk of harmful interference is negligible, not make the use of radio frequencies subject to the grant of individual rights of use but shall include the conditions for usage of such radio frequencies in the general authorisation.

2. Where it is necessary to grant individual rights of use for radio frequencies and numbers, Member States shall grant such rights, upon request, to any undertaking providing or using networks or services under the general authorisation, subject to the provisions of Articles 6, 7 and 11(1)(c) of this Directive and any other rules ensuring the efficient use of those resources in accordance with Directive 2002/21/EC (Framework Directive).

Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use of radio frequencies to providers of radio or television broadcast content services with a view to pursuing general interest objectives in conformity with Community law, such rights of use shall be granted through open, transparent and non-discriminatory procedures. When granting rights of use, Member States shall specify whether those rights can be transferred at the initiative of the right holder, and under which conditions, in the case of radio frequencies, in accordance with Article 9 of Directive 2002/21/EC (Framework Directive). Where Member States grant rights of use for a limited period of time, the duration shall be appropriate for the service concerned.

3. Decisions on rights of use shall be taken, communicated and made public as soon as possible after receipt of the complete application by the national regulatory authority, within three weeks in the case of numbers that have been allocated for specific purposes within the national numbering plan and within six weeks in the case of radio frequencies that have been allocated for specific purposes within the national

frequency plan. The latter time limit shall be without prejudice to any applicable international agreements relating to the use of radio frequencies or of orbital positions.

4. Where it has been decided, after consultation with interested parties in accordance with Article 6 of Directive 2002/21/EC (Framework Directive), that rights for use of numbers of exceptional economic value are to be granted through competitive or comparative selection procedures, Member States may extend the maximum period of three weeks by up to three weeks.

With regard to competitive or comparative selection procedures for radio frequencies Article 7 shall apply.

5. Member States shall not limit the number of rights of use to be granted except where this is necessary to ensure the efficient use of radio frequencies in accordance with Article 7.

#### Article 6

### Conditions attached to the general authorisation and to the rights of use for radio frequencies and for numbers, and specific obligations

1. The general authorisation for the provision of electronic communications networks or services and the rights of use for radio frequencies and rights of use for numbers may be subject only to the conditions listed respectively in parts A, B and C of the Annex. Such conditions shall be objectively justified in relation to the network or service concerned, non-discriminatory, proportionate and transparent.

2. Specific obligations which may be imposed on providers of electronic communications networks and services under Articles 5(1), 5(2), 6 and 8 of Directive 2002/19/EC (Access Directive) and Articles 16, 17, 18 and 19 of Directive 2002/22/EC (Universal Service Directive) or on those designated to provide universal service under the said Directive shall be legally separate from the rights and obligations under the general authorisation. In order to achieve transparency for undertakings, the criteria and procedures for imposing such specific obligations on individual undertakings shall be referred to in the general authorisation.

3. The general authorisation shall only contain conditions which are specific for that sector and are set out in Part A of the Annex and shall not duplicate conditions which are applicable to undertakings by virtue of other national legislation.

4. Member States shall not duplicate the conditions of the general authorisation where they grant the right of use for radio frequencies or numbers.

<sup>(1)</sup> See page 51 of this Official Journal.

## Article 7

**Procedure for limiting the number of rights of use to be granted for radio frequencies**

1. Where a Member State is considering whether to limit the number of rights of use to be granted for radio frequencies, it shall *inter alia*:

- (a) give due weight to the need to maximise benefits for users and to facilitate the development of competition;
- (b) give all interested parties, including users and consumers, the opportunity to express their views on any limitation in accordance with Article 6 of Directive 2002/21/EC (Framework Directive);
- (c) publish any decision to limit the granting of rights of use, stating the reasons therefor;
- (d) after having determined the procedure, invite applications for rights of use; and
- (e) review the limitation at reasonable intervals or at the reasonable request of affected undertakings.

2. Where a Member State concludes that further rights of use for radio frequencies can be granted, it shall publish that conclusion and invite applications for such rights.

3. Where the granting of rights of use for radio frequencies needs to be limited, Member States shall grant such rights on the basis of selection criteria which must be objective, transparent, non-discriminatory and proportionate. Any such selection criteria must give due weight to the achievement of the objectives of Article 8 of Directive 2002/21/EC (Framework Directive).

4. Where competitive or comparative selection procedures are to be used, Member States may extend the maximum period of six weeks referred to in Article 5(3) for as long as necessary to ensure that such procedures are fair, reasonable, open and transparent to all interested parties, but by no longer than eight months.

These time limits shall be without prejudice to any applicable international agreements relating to the use of radio frequencies and satellite coordination.

5. This Article is without prejudice to the transfer of rights of use for radio frequencies in accordance with Article 9 of Directive 2002/21/EC (Framework Directive).

## Article 8

**Harmonised assignment of radio frequencies**

Where the usage of radio frequencies has been harmonised, access conditions and procedures have been agreed, and

undertakings to which the radio frequencies shall be assigned have been selected in accordance with international agreements and Community rules, Member States shall grant the right of use for such radio frequencies in accordance therewith. Provided that all national conditions attached to the right to use the radio frequencies concerned have been satisfied in the case of a common selection procedure, Member States shall not impose any further conditions, additional criteria or procedures which would restrict, alter or delay the correct implementation of the common assignment of such radio frequencies.

## Article 9

**Declarations to facilitate the exercise of rights to install facilities and rights of interconnection**

At the request of an undertaking, national regulatory authorities shall, within one week, issue standardised declarations, confirming, where applicable, that the undertaking has submitted a notification under Article 3(2) and detailing under what circumstances any undertaking providing electronic communications networks or services under the general authorisation has the right to apply for rights to install facilities, negotiate interconnection, and/or obtain access or interconnection in order to facilitate the exercise of those rights for instance at other levels of government or in relation to other undertakings. Where appropriate such declarations may also be issued as an automatic reply following the notification referred to in Article 3(2).

## Article 10

**Compliance with the conditions of the general authorisation or of rights of use and with specific obligations**

1. National regulatory authorities may require undertakings providing electronic communications networks or services covered by the general authorisation or enjoying rights of use for radio frequencies or numbers to provide information necessary to verify compliance with the conditions of the general authorisation or of rights of use or with the specific obligations referred to in Article 6(2), in accordance with Article 11.

2. Where a national regulatory authority finds that an undertaking does not comply with one or more of the conditions of the general authorisation, or of rights of use or with the specific obligations referred to in Article 6(2), it shall notify the undertaking of those findings and give the undertaking a reasonable opportunity to state its views or remedy any breaches within:

- one month after notification, or
- a shorter period agreed by the undertaking or stipulated by the national regulatory authority in case of repeated breaches, or

— a longer period decided by the national regulatory authority.

3. If the undertaking concerned does not remedy the breaches within the period as referred to in paragraph 2, the relevant authority shall take appropriate and proportionate measures aimed at ensuring compliance. In this regard, Member States may empower the relevant authorities to impose financial penalties where appropriate. The measures and the reasons on which they are based shall be communicated to the undertaking concerned within one week of their adoption and shall stipulate a reasonable period for the undertaking to comply with the measure.

4. Notwithstanding the provisions of paragraphs 2 and 3, Member States may empower the relevant authority to impose financial penalties where appropriate on undertakings for failure to provide information in accordance with obligations imposed under Article 11(1)(a) or (b) of this Directive or Article 9 of Directive 2002/19/EC (Access Directive) within a reasonable period stipulated by the national regulatory authority.

5. In cases of serious and repeated breaches of the conditions of the general authorisation, the rights of use or specific obligations referred to in Article 6(2), where measures aimed at ensuring compliance as referred to in paragraph 3 of this Article have failed, national regulatory authorities may prevent an undertaking from continuing to provide electronic communications networks or services or suspend or withdraw rights of use.

6. Irrespective of the provisions of paragraphs 2, 3 and 5, where the relevant authority has evidence of a breach of the conditions of the general authorisation, rights of use or specific obligations referred to in Article 6(2) that represents an immediate and serious threat to public safety, public security or public health or will create serious economic or operational problems for other providers or users of electronic communications networks or services, it may take urgent interim measures to remedy the situation in advance of reaching a final decision. The undertaking concerned shall thereafter be given a reasonable opportunity to state its view and propose any remedies. Where appropriate, the relevant authority may confirm the interim measures.

7. Undertakings shall have the right to appeal against measures taken under this Article in accordance with the procedure referred to in Article 4 of Directive 2002/21/EC (Framework Directive).

#### Article 11

#### Information required under the general authorisation, for rights of use and for the specific obligations

1. Without prejudice to information and reporting obligations under national legislation other than the general

authorisation, national regulatory authorities may only require undertakings to provide information under the general authorisation, for rights of use or the specific obligations referred to in Article 6(2) that is proportionate and objectively justified for:

- (a) systematic or case-by-case verification of compliance with conditions 1 and 2 of Part A, condition 6 of Part B and condition 7 of Part C of the Annex and of compliance with obligations as referred to in Article 6(2);
- (b) case-by-case verification of compliance with conditions as set out in the Annex where a complaint has been received or where the national regulatory authority has other reasons to believe that a condition is not complied with or in case of an investigation by the national regulatory authority on its own initiative;
- (c) procedures for and assessment of requests for granting rights of use;
- (d) publication of comparative overviews of quality and price of services for the benefit of consumers;
- (e) clearly defined statistical purposes;
- (f) market analysis for the purposes of Directive 2002/19/EC (Access Directive) or Directive 2002/22/EC (Universal Service Directive).

The information referred to in points (a), (b), (d), (e) and (f) of the first subparagraph may not be required prior to or as a condition for market access.

2. Where national regulatory authorities require undertakings to provide information as referred to in paragraph 1, they shall inform them of the specific purpose for which this information is to be used.

#### Article 12

#### Administrative charges

1. Any administrative charges imposed on undertakings providing a service or a network under the general authorisation or to whom a right of use has been granted shall:

- (a) in total, cover only the administrative costs which will be incurred in the management, control and enforcement of the general authorisation scheme and of rights of use and of specific obligations as referred to in Article 6(2), which may include costs for international cooperation, harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as regulatory work involving preparation and enforcement of secondary legislation and administrative decisions, such as decisions on access and interconnection; and

(b) be imposed upon the individual undertakings in an objective, transparent and proportionate manner which minimises additional administrative costs and attendant charges.

2. Where national regulatory authorities impose administrative charges, they shall publish a yearly overview of their administrative costs and of the total sum of the charges collected. In the light of the difference between the total sum of the charges and the administrative costs, appropriate adjustments shall be made.

#### Article 13

### Fees for rights of use and rights to install facilities

Member States may allow the relevant authority to impose fees for the rights of use for radio frequencies or numbers or rights to install facilities on, over or under public or private property which reflect the need to ensure the optimal use of these resources. Member States shall ensure that such fees shall be objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the objectives in Article 8 of Directive 2002/21/EC (Framework Directive).

#### Article 14

### Amendment of rights and obligations

1. Member States shall ensure that the rights, conditions and procedures concerning general authorisations and rights of use or rights to install facilities may only be amended in objectively justified cases and in a proportionate manner. Notice shall be given in an appropriate manner of the intention to make such amendments and interested parties, including users and consumers, shall be allowed a sufficient period of time to express their views on the proposed amendments, which shall be no less than four weeks except in exceptional circumstances.

2. Member States shall not restrict or withdraw rights to install facilities before expiry of the period for which they were granted except where justified and where applicable in conformity with relevant national provisions regarding compensation for withdrawal of rights.

#### Article 15

### Publication of information

1. Member States shall ensure that all relevant information on rights, conditions, procedures, charges, fees and decisions concerning general authorisations and rights of use is published and kept up to date in an appropriate manner so as to provide easy access to that information for all interested parties.

2. Where information as referred to in paragraph 1 is held at different levels of government, in particular information regarding procedures and conditions on rights to install facilities, the national regulatory authority shall make all reasonable efforts, bearing in mind the costs involved, to create a user-friendly overview of all such information, including information on the relevant levels of government and the responsible authorities, in order to facilitate applications for rights to install facilities.

#### Article 16

### Review procedures

The Commission shall periodically review the functioning of the national authorisation systems and the development of cross-border service provision within the Community and report to the European Parliament and to the Council on the first occasion not later than three years after the date of application of this Directive referred to in Article 18(1), second subparagraph. For this purpose, the Commission may request from the Member States information, which shall be supplied without undue delay.

#### Article 17

### Existing authorisations

1. Member States shall bring authorisations already in existence on the date of entry into force of this Directive into line with the provisions of this Directive by at the latest the date of application referred to in Article 18(1), second subparagraph.

2. Where application of paragraph 1 results in a reduction of the rights or an extension of the obligations under authorisations already in existence, Member States may extend the validity of those rights and obligations until at the latest nine months after the date of application referred to in Article 18(1), second subparagraph, provided that the rights of other undertakings under Community law are not affected thereby. Member States shall notify such extensions to the Commission and state the reasons therefor.

3. Where the Member State concerned can prove that the abolition of an authorisation condition regarding access to electronic communications networks, which was in force before the date of entry into force of this Directive, creates excessive difficulties for undertakings that have benefited from mandated access to another network, and where it is not possible for these undertakings to negotiate new agreements on reasonable commercial terms before the date of application referred to in Article 18(1), second subparagraph, Member States may request a temporary prolongation of the relevant condition(s). Such requests shall be submitted by the date of application referred to in Article 18(1), second subparagraph,



at the latest, and shall specify the condition(s) and period for which the temporary prolongation is requested.

The Member State shall inform the Commission of the reasons for requesting a prolongation. The Commission shall consider such a request, taking into account the particular situation in that Member State and of the undertaking(s) concerned, and the need to ensure a coherent regulatory environment at a Community level. It shall take a decision on whether to grant or reject the request, and where it decides to grant the request, on the scope and duration of the prolongation to be granted. The Commission shall communicate its decision to the Member State concerned within six months after receipt of the application for a prolongation. Such decisions shall be published in the *Official Journal of the European Communities*.

#### Article 18

#### Transposition

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive by 24 July 2003 at the latest. They shall forthwith inform the Commission thereof.

They shall apply those measures from 25 July 2003.

When Member States adopt these measures, they shall contain a reference to this Directive or be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field governed by this Directive and of any subsequent amendments to those provisions.

#### Article 19

#### Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

#### Article 20

#### Addressees

This Directive is addressed to the Member States.

Done at Brussels, 7 March 2002.

*For the European Parliament*

*The President*

P. COX

*For the Council*

*The President*

J. C. APARICIO

## ANNEX

The conditions listed in this Annex provide the maximum list of conditions which may be attached to general authorisations (Part A), rights to use radio frequencies (Part B) and rights to use numbers (Part C) as referred to in Article 6(1) and Article 11(1)(a).

**A. Conditions which may be attached to a general authorisation**

1. Financial contributions to the funding of universal service in conformity with Directive 2002/22/EC (Universal Service Directive).
2. Administrative charges in accordance with Article 12 of this Directive.
3. Interoperability of services and interconnection of networks in conformity with Directive 2002/19/EC (Access Directive).
4. Accessibility of numbers from the national numbering plan to end-users including conditions in conformity with Directive 2002/22/EC (Universal Service Directive).
5. Environmental and town and country planning requirements, as well as requirements and conditions linked to the granting of access to or use of public or private land and conditions linked to co-location and facility sharing in conformity with Directive 2002/22/EC (Framework Directive) and including, where applicable, any financial or technical guarantees necessary to ensure the proper execution of infrastructure works.
6. 'Must carry' obligations in conformity with Directive 2002/22/EC (Universal Service Directive).
7. Personal data and privacy protection specific to the electronic communications sector in conformity with Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector <sup>(1)</sup>.
8. Consumer protection rules specific to the electronic communications sector including conditions in conformity with Directive 2002/22/EC (Universal Service Directive).
9. Restrictions in relation to the transmission of illegal content, in accordance with Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the internal market <sup>(2)</sup> and restrictions in relation to the transmission of harmful content in accordance with Article 2a(2) of Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities <sup>(3)</sup>.
10. Information to be provided under a notification procedure in accordance with Article 3(3) of this Directive and for other purposes as included in Article 11 of this Directive.
11. Enabling of legal interception by competent national authorities in conformity with Directive 97/66/EC and Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data <sup>(4)</sup>.
12. Terms of use during major disasters to ensure communications between emergency services and authorities and broadcasts to the general public.
13. Measures regarding the limitation of exposure of the general public to electromagnetic fields caused by electronic communications networks in accordance with Community law.
14. Access obligations other than those provided for in Article 6(2) of this Directive applying to undertakings providing electronic communications networks or services, in conformity with Directive 2002/19/EC (Access Directive).

<sup>(1)</sup> OJ L 24, 30.1.1998, p. 1.

<sup>(2)</sup> OJ L 178, 17.7.2000, p. 1.

<sup>(3)</sup> OJ L 298, 17.10.1989, p. 23. Directive as amended by Directive 97/36/EC of the European Parliament and of the Council (OJ L 202, 30.7.1997, p. 60).

<sup>(4)</sup> OJ L 281, 23.11.1995, p. 31.

15. Maintenance of the integrity of public communications networks in accordance with Directive 2002/19/EC (Access Directive) and Directive 2002/22/EC (Universal Service Directive) including by conditions to prevent electromagnetic interference between electronic communications networks and/or services in accordance with Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility <sup>(1)</sup>.
16. Security of public networks against unauthorised access according to Directive 97/66/EC.
17. Conditions for the use of radio frequencies, in conformity with Article 7(2) of Directive 1999/5/EC, where such use is not made subject to the granting of individual rights of use in accordance with Article 5(1) of this Directive.
18. Measures designed to ensure compliance with the standards and/or specifications referred to in Article 17 of Directive 2002/21/EC (Framework Directive).

**B. Conditions which may be attached to rights of use for radio frequencies**

1. Designation of service or type of network or technology for which the rights of use for the frequency has been granted, including, where applicable, the exclusive use of a frequency for the transmission of specific content or specific audiovisual services.
2. Effective and efficient use of frequencies in conformity with Directive 2002/21/EC (Framework Directive), including, where appropriate, coverage requirements.
3. Technical and operational conditions necessary for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields, where such conditions are different from those included in the general authorisation.
4. Maximum duration in conformity with Article 5 of this Directive, subject to any changes in the national frequency plan.
5. Transfer of rights at the initiative of the right holder and conditions for such transfer in conformity with Directive 2002/21/EC (Framework Directive).
6. Usage fees in accordance with Article 13 of this Directive.
7. Any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure.
8. Obligations under relevant international agreements relating to the use of frequencies.

**C. Conditions which may be attached to rights of use for numbers**

1. Designation of service for which the number shall be used, including any requirements linked to the provision of that service.
2. Effective and efficient use of numbers in conformity with Directive 2002/21/EC (Framework Directive).
3. Number portability requirements in conformity with Directive 2002/22/EC (Universal Service Directive).
4. Obligation to provide public directory subscriber information for the purposes of Articles 5 and 25 of Directive 2002/22/EC (Universal Service Directive).
5. Maximum duration in conformity with Article 5 of this Directive, subject to any changes in the national numbering plan.
6. Transfer of rights at the initiative of the right holder and conditions for such transfer in conformity with Directive 2002/21/EC (Framework Directive).
7. Usage fees in accordance with Article 13 of this Directive.
8. Any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure.
9. Obligations under relevant international agreements relating to the use of numbers.

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<sup>(1)</sup> OJ L 139, 23.5.1989, p. 19. Directive as last amended by Directive 93/68/EEC (OJ L 220, 30.8.1993, p. 1).

**DIRECTIVE 2002/21/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**of 7 March 2002**

**on a common regulatory framework for electronic communications networks and services  
(Framework Directive)**

THE EUROPEAN PARLIAMENT AND THE  
COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(3)</sup>,

Whereas:

- (1) The current regulatory framework for telecommunications has been successful in creating the conditions for effective competition in the telecommunications sector during the transition from monopoly to full competition.
- (2) On 10 November 1999, the Commission presented a communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions entitled 'Towards a new framework for electronic communications infrastructure and associated services – the 1999 communications review'. In that communication, the Commission reviewed the existing regulatory framework for telecommunications, in accordance with its obligation under Article 8 of Council Directive 90/387/EEC of 28 June 1990 on the establishment of the internal market for telecommunications services through the implementation of open network provision <sup>(4)</sup>. It also presented a series of policy proposals for a new regulatory framework for electronic communications infrastructure and associated services for public consultation.
- (3) On 26 April 2000 the Commission presented a communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the results of the public

consultation on the 1999 communications review and orientations for the new regulatory framework. The communication summarised the public consultation and set out certain key orientations for the preparation of a new framework for electronic communications infrastructure and associated services.

- (4) The Lisbon European Council of 23 and 24 March 2000 highlighted the potential for growth, competitiveness and job creation of the shift to a digital, knowledge-based economy. In particular, it emphasised the importance for Europe's businesses and citizens of access to an inexpensive, world-class communications infrastructure and a wide range of services.

- (5) The convergence of the telecommunications, media and information technology sectors means all transmission networks and services should be covered by a single regulatory framework. That regulatory framework consists of this Directive and four specific Directives: Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) <sup>(5)</sup>, Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive) <sup>(6)</sup>, Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) <sup>(7)</sup>, Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector <sup>(8)</sup>, (hereinafter referred to as 'the Specific Directives'). It is necessary to separate the regulation of transmission from the regulation of content. This framework does not therefore cover the content of services delivered over electronic communications networks using electronic communications services, such as broadcasting content, financial services and certain information society services, and is therefore without prejudice to measures taken at Community or national level in respect of such services, in compliance with Community law, in order to promote cultural and linguistic diversity and to ensure the defence of media pluralism. The content of

<sup>(1)</sup> OJ C 365 E, 19.12.2000, p. 198 and OJ C 270 E, 25.9.2001, p. 199.

<sup>(2)</sup> OJ C 123, 25.4.2001, p. 56.

<sup>(3)</sup> Opinion of the European Parliament of 1 March 2001 (OJ C 277, 1.10.2001, p. 91), Council Common Position of 17 September 2001 (OJ C 337, 30.11.2001, p. 34) and Decision of the European Parliament of 12 December 2001 (not yet published in the Official Journal). Council Decision of 14 February 2002.

<sup>(4)</sup> OJ L 192, 24.7.1990, p. 1. Directive as amended by Directive 97/51/EC of the European Parliament and of the Council (OJ L 295, 29.10.1997, p. 23).

<sup>(5)</sup> See page 21 of this Official Journal.

<sup>(6)</sup> See page 7 of this Official Journal.

<sup>(7)</sup> See page 51 of this Official Journal.

<sup>(8)</sup> OJ L 24, 30.1.1998, p. 1.

television programmes is covered by Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities <sup>(1)</sup>. The separation between the regulation of transmission and the regulation of content does not prejudice the taking into account of the links existing between them, in particular in order to guarantee media pluralism, cultural diversity and consumer protection.

- (6) Audiovisual policy and content regulation are undertaken in pursuit of general interest objectives, such as freedom of expression, media pluralism, impartiality, cultural and linguistic diversity, social inclusion, consumer protection and the protection of minors. The Commission communication 'Principles and guidelines for the Community's audio-visual policy in the digital age', and the Council conclusions of 6 June 2000 welcoming this communication, set out the key actions to be taken by the Community to implement its audio-visual policy.
- (7) The provisions of this Directive and the Specific Directives are without prejudice to the possibility for each Member State to take the necessary measures to ensure the protection of its essential security interests, to safeguard public policy and public security, and to permit the investigation, detection and prosecution of criminal offences, including the establishment by national regulatory authorities of specific and proportional obligations applicable to providers of electronic communications services.
- (8) This Directive does not cover equipment within the scope of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity <sup>(2)</sup>, but does cover consumer equipment used for digital television. It is important for regulators to encourage network operators and terminal equipment manufacturers to cooperate in order to facilitate access by disabled users to electronic communications services.
- (9) Information society services are covered by Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the internal market (Directive on electronic commerce) <sup>(3)</sup>.

- (10) The definition of 'information society service' in Article 1 of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules of information society services <sup>(4)</sup> spans a wide range of economic activities which take place on-line. Most of these activities are not covered by the scope of this Directive because they do not consist wholly or mainly in the conveyance of signals on electronic communications networks. Voice telephony and electronic mail conveyance services are covered by this Directive. The same undertaking, for example an Internet service provider, can offer both an electronic communications service, such as access to the Internet, and services not covered under this Directive, such as the provision of web-based content.
- (11) In accordance with the principle of the separation of regulatory and operational functions, Member States should guarantee the independence of the national regulatory authority or authorities with a view to ensuring the impartiality of their decisions. This requirement of independence is without prejudice to the institutional autonomy and constitutional obligations of the Member States or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership laid down in Article 295 of the Treaty. National regulatory authorities should be in possession of all the necessary resources, in terms of staffing, expertise, and financial means, for the performance of their tasks.
- (12) Any party who is the subject of a decision by a national regulatory authority should have the right to appeal to a body that is independent of the parties involved. This body may be a court. Furthermore, any undertaking which considers that its applications for the granting of rights to install facilities have not been dealt with in accordance with the principles set out in this Directive should be entitled to appeal against such decisions. This appeal procedure is without prejudice to the division of competences within national judicial systems and to the rights of legal entities or natural persons under national law.
- (13) National regulatory authorities need to gather information from market players in order to carry out their tasks effectively. Such information may also need to be gathered on behalf of the Commission, to allow it to fulfil its obligations under Community law. Requests for information should be proportionate and not impose an undue burden on undertakings. Information

<sup>(1)</sup> OJ L 298, 17.10.1989, p. 23. Directive as amended by Directive 97/36/EC of the European Parliament and of the Council (OJ L 202, 30.7.1997, p. 60).

<sup>(2)</sup> OJ L 91, 7.4.1999, p. 10.

<sup>(3)</sup> OJ L 178, 17.7.2000, p. 1.

<sup>(4)</sup> OJ L 204, 21.7.1998, p. 37. Directive as amended by Directive 98/48/EC (OJ L 217, 5.8.1998, p. 18).

gathered by national regulatory authorities should be publicly available, except in so far as it is confidential in accordance with national rules on public access to information and subject to Community and national law on business confidentiality.

- (14) Information that is considered confidential by a national regulatory authority, in accordance with Community and national rules on business confidentiality, may only be exchanged with the Commission and other national regulatory authorities where such exchange is strictly necessary for the application of the provisions of this Directive or the Specific Directives. The information exchanged should be limited to that which is relevant and proportionate to the purpose of such an exchange.
- (15) It is important that national regulatory authorities consult all interested parties on proposed decisions and take account of their comments before adopting a final decision. In order to ensure that decisions at national level do not have an adverse effect on the single market or other Treaty objectives, national regulatory authorities should also notify certain draft decisions to the Commission and other national regulatory authorities to give them the opportunity to comment. It is appropriate for national regulatory authorities to consult interested parties on all draft measures which have an effect on trade between Member States. The cases where the procedures referred to in Articles 6 and 7 apply are defined in this Directive and in the Specific Directives. The Commission should be able, after consulting the Communications Committee, to require a national regulatory authority to withdraw a draft measure where it concerns definition of relevant markets or the designation or not of undertakings with significant market power, and where such decisions would create a barrier to the single market or would be incompatible with Community law and in particular the policy objectives that national regulatory authorities should follow. This procedure is without prejudice to the notification procedure provided for in Directive 98/34/EC and the Commission's prerogatives under the Treaty in respect of infringements of Community law.
- (16) National regulatory authorities should have a harmonised set of objectives and principles to underpin, and should, where necessary, coordinate their actions with the regulatory authorities of other Member States in carrying out their tasks under this regulatory framework.
- (17) The activities of national regulatory authorities established under this Directive and the Specific Directives contribute to the fulfilment of broader policies in the areas of culture, employment, the environment, social cohesion and town and country planning.

- (18) The requirement for Member States to ensure that national regulatory authorities take the utmost account of the desirability of making regulation technologically neutral, that is to say that it neither imposes nor discriminates in favour of the use of a particular type of technology, does not preclude the taking of proportionate steps to promote certain specific services where this is justified, for example digital television as a means for increasing spectrum efficiency.
- (19) Radio frequencies are an essential input for radio-based electronic communications services and, in so far as they relate to such services, should therefore be allocated and assigned by national regulatory authorities according to a set of harmonised objectives and principles governing their action as well as to objective, transparent and non-discriminatory criteria, taking into account the democratic, social, linguistic and cultural interests related to the use of frequency. It is important that the allocation and assignment of radio frequencies is managed as efficiently as possible. Transfer of radio frequencies can be an effective means of increasing efficient use of spectrum, as long as there are sufficient safeguards in place to protect the public interest, in particular the need to ensure transparency and regulatory supervision of such transfers. Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) <sup>(1)</sup> establishes a framework for harmonisation of radio frequencies, and action taken under this Directive should seek to facilitate the work under that Decision.
- (20) Access to numbering resources on the basis of transparent, objective and non-discriminatory criteria is essential for undertakings to compete in the electronic communications sector. All elements of national numbering plans should be managed by national regulatory authorities, including point codes used in network addressing. Where there is a need for harmonisation of numbering resources in the Community to support the development of pan-European services, the Commission may take technical implementing measures using its executive powers. Where this is appropriate to ensure full global interoperability of services, Member States should coordinate their national positions in accordance with the Treaty in international organisations and fora where numbering decisions are taken. The provisions of this Directive do not establish any new areas of responsibility for the national regulatory authorities in the field of Internet naming and addressing.

<sup>(1)</sup> See page 1 of this Official Journal.

- (21) Member States may use, *inter alia*, competitive or comparative selection procedures for the assignment of radio frequencies as well as numbers with exceptional economic value. In administering such schemes, national regulatory authorities should take into account the provisions of Article 8.
- (22) It should be ensured that procedures exist for the granting of rights to install facilities that are timely, non-discriminatory and transparent, in order to guarantee the conditions for fair and effective competition. This Directive is without prejudice to national provisions governing the expropriation or use of property, the normal exercise of property rights, the normal use of the public domain, or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership.
- (23) Facility sharing can be of benefit for town planning, public health or environmental reasons, and should be encouraged by national regulatory authorities on the basis of voluntary agreements. In cases where undertakings are deprived of access to viable alternatives, compulsory facility or property sharing may be appropriate. It covers *inter alia*: physical co-location and duct, building, mast, antenna or antenna system sharing. Compulsory facility or property sharing should be imposed on undertakings only after full public consultation.
- (24) Where mobile operators are required to share towers or masts for environmental reasons, such mandated sharing may lead to a reduction in the maximum transmitted power levels allowed for each operator for reasons of public health, and this in turn may require operators to install more transmission sites to ensure national coverage.
- (25) There is a need for *ex ante* obligations in certain circumstances in order to ensure the development of a competitive market. The definition of significant market power in the Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of open network provision (ONP) <sup>(1)</sup> has proved effective in the initial stages of market opening as the threshold for *ex ante* obligations, but now needs to be adapted to suit more complex and dynamic markets. For this reason, the definition used in
- this Directive is equivalent to the concept of dominance as defined in the case law of the Court of Justice and the Court of First Instance of the European Communities.
- (26) Two or more undertakings can be found to enjoy a joint dominant position not only where there exist structural or other links between them but also where the structure of the relevant market is conducive to coordinated effects, that is, it encourages parallel or aligned anti-competitive behaviour on the market.
- (27) It is essential that *ex ante* regulatory obligations should only be imposed where there is not effective competition, i.e. in markets where there are one or more undertakings with significant market power, and where national and Community competition law remedies are not sufficient to address the problem. It is necessary therefore for the Commission to draw up guidelines at Community level in accordance with the principles of competition law for national regulatory authorities to follow in assessing whether competition is effective in a given market and in assessing significant market power. National regulatory authorities should analyse whether a given product or service market is effectively competitive in a given geographical area, which could be the whole or a part of the territory of the Member State concerned or neighbouring parts of territories of Member States considered together. An analysis of effective competition should include an analysis as to whether the market is prospectively competitive, and thus whether any lack of effective competition is durable. Those guidelines will also address the issue of newly emerging markets, where de facto the market leader is likely to have a substantial market share but should not be subjected to inappropriate obligations. The Commission should review the guidelines regularly to ensure that they remain appropriate in a rapidly developing market. National regulatory authorities will need to cooperate with each other where the relevant market is found to be transnational.
- (28) In determining whether an undertaking has significant market power in a specific market, national regulatory authorities should act in accordance with Community law and take into the utmost account the Commission guidelines.
- (29) The Community and the Member States have entered into commitments in relation to standards and the regulatory framework of telecommunications networks and services in the World Trade Organisation.

<sup>(1)</sup> OJ L 199, 26.7.1997, p. 32. Directive as amended by Directive 98/61/EC (OJ L 268, 3.10.1998, p. 37).

- (30) Standardisation should remain primarily a market-driven process. However there may still be situations where it is appropriate to require compliance with specified standards at Community level to ensure interoperability in the single market. At national level, Member States are subject to the provisions of Directive 98/34/EC, Directive 95/47/EC of the European Parliament and of the Council of 24 October 1995 on the use of standards for the transmission of television signals <sup>(1)</sup> did not mandate any specific digital television transmission system or service requirement. Through the Digital Video Broadcasting Group, European market players have developed a family of television transmission systems that have been standardised by the European Telecommunications Standards Institute (ETSI) and have become International Telecommunication Union recommendations. Any decision to make the implementation of such standards mandatory should follow a full public consultation. Standardisation procedures under this Directive are without prejudice to the provisions of Directive 1999/5/EC, Council Directive 73/23/EEC of 19 February 1973 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits <sup>(2)</sup> and Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility <sup>(3)</sup>.
- (31) Interoperability of digital interactive television services and enhanced digital television equipment, at the level of the consumer, should be encouraged in order to ensure the free flow of information, media pluralism and cultural diversity. It is desirable for consumers to have the capability of receiving, regardless of the transmission mode, all digital interactive television services, having regard to technological neutrality, future technological progress, the need to promote the take-up of digital television, and the state of competition in the markets for digital television services. Digital interactive television platform operators should strive to implement an open application program interface (API) which conforms to standards or specifications adopted by a European standards organisation. Migration from existing APIs to new open APIs should be encouraged and organised, for example by Memoranda of Understanding between all relevant market players. Open APIs facilitate interoperability, i.e. the portability of interactive content between delivery mechanisms, and full functionality of this content on enhanced digital television equipment. However, the need not to hinder the functioning of the receiving equipment and to protect it from malicious attacks, for example from viruses, should be taken into account.
- (32) In the event of a dispute between undertakings in the same Member State in an area covered by this Directive or the Specific Directives, for example relating to obligations for access and interconnection or to the means of transferring subscriber lists, an aggrieved party that has negotiated in good faith but failed to reach agreement should be able to call on the national regulatory authority to resolve the dispute. National regulatory authorities should be able to impose a solution on the parties. The intervention of a national regulatory authority in the resolution of a dispute between undertakings providing electronic communications networks or services in a Member State should seek to ensure compliance with the obligations arising under this Directive or the Specific Directives.
- (33) In addition to the rights of recourse granted under national or Community law, there is a need for a simple procedure to be initiated at the request of either party in a dispute, to resolve cross-border disputes which lie outside the competence of a single national regulatory authority.
- (34) A single Committee should replace the 'ONP Committee' instituted by Article 9 of Directive 90/387/EEC and the Licensing Committee instituted by Article 14 of Directive 97/13/EC of the European Parliament and of the Council of 10 April 1997 on a common framework for general authorisations and individual licences in the field of telecommunications services <sup>(4)</sup>.
- (35) National regulatory authorities and national competition authorities should provide each other with the information necessary to apply the provisions of this Directive and the Specific Directives, in order to allow them to cooperate fully together. In respect of the information exchanged, the receiving authority should ensure the same level of confidentiality as the originating authority.
- (36) The Commission has indicated its intention to set up a European regulators group for electronic communications networks and services which would constitute a suitable mechanism for encouraging cooperation and coordination of national regulatory authorities, in order to promote the development of the internal market for electronic communications networks and services, and to seek to achieve consistent application, in all Member States, of the provisions set out in this Directive and the Specific Directives, in particular in areas where national law implementing Community law gives national regulatory authorities considerable discretionary powers in application of the relevant rules.

<sup>(1)</sup> OJ L 281, 23.11.1995, p. 51.

<sup>(2)</sup> OJ L 77, 26.3.1973, p. 29.

<sup>(3)</sup> OJ L 139, 23.5.1989, p. 19.

<sup>(4)</sup> OJ L 117, 7.5.1997, p. 15.



- (37) National regulatory authorities should be required to cooperate with each other and with the Commission in a transparent manner to ensure consistent application, in all Member States, of the provisions of this Directive and the Specific Directives. This cooperation could take place, *inter alia*, in the Communications Committee or in a group comprising European regulators. Member States should decide which bodies are national regulatory authorities for the purposes of this Directive and the Specific Directives.
- (38) Measures that could affect trade between Member States are measures that may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner which might create a barrier to the single market. They comprise measures that have a significant impact on operators or users in other Member States, which include, *inter alia*: measures which affect prices for users in other Member States; measures which affect the ability of an undertaking established in another Member State to provide an electronic communications service, and in particular measures which affect the ability to offer services on a transnational basis; and measures which affect market structure or access, leading to repercussions for undertakings in other Member States.
- (39) The provisions of this Directive should be reviewed periodically, in particular with a view to determining the need for modification in the light of changing technological or market conditions.
- (40) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission <sup>(1)</sup>.
- (41) Since the objectives of the proposed action, namely achieving a harmonised framework for the regulation of electronic communications services, electronic communications networks, associated facilities and associated services cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary for those objectives.
- (42) Certain directives and decisions in this field should be repealed.
- (43) The Commission should monitor the transition from the existing framework to the new framework, and may in particular, at an appropriate time, bring forward a proposal to repeal Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop <sup>(2)</sup>.

HAVE ADOPTED THIS DIRECTIVE:

#### CHAPTER I

#### SCOPE, AIM AND DEFINITIONS

##### Article 1

#### Scope and aim

1. This Directive establishes a harmonised framework for the regulation of electronic communications services, electronic communications networks, associated facilities and associated services. It lays down tasks of national regulatory authorities and establishes a set of procedures to ensure the harmonised application of the regulatory framework throughout the Community.
2. This Directive as well as the Specific Directives are without prejudice to obligations imposed by national law in accordance with Community law or by Community law in respect of services provided using electronic communications networks and services.
3. This Directive as well as the Specific Directives are without prejudice to measures taken at Community or national level, in compliance with Community law, to pursue general interest objectives, in particular relating to content regulation and audio-visual policy.
4. This Directive and the Specific Directives are without prejudice to the provisions of Directive 1999/5/EC.

##### Article 2

#### Definitions

For the purposes of this Directive:

- (a) 'electronic communications network' means transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting

<sup>(1)</sup> OJ L 184, 17.7.1999, p. 23.

<sup>(2)</sup> OJ L 336, 30.12.2000, p. 4.

- signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed;
- (b) 'transnational markets' means markets identified in accordance with Article 15(4) covering the Community or a substantial part thereof;
- (c) 'electronic communications service' means a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but exclude services providing, or exercising editorial control over, content transmitted using electronic communications networks and services; it does not include information society services, as defined in Article 1 of Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks;
- (d) 'public communications network' means an electronic communications network used wholly or mainly for the provision of publicly available electronic communications services;
- (e) 'associated facilities' means those facilities associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service. It includes conditional access systems and electronic programme guides;
- (f) 'conditional access system' means any technical measure and/or arrangement whereby access to a protected radio or television broadcasting service in intelligible form is made conditional upon subscription or other form of prior individual authorisation;
- (g) 'national regulatory authority' means the body or bodies charged by a Member State with any of the regulatory tasks assigned in this Directive and the Specific Directives;
- (h) 'user' means a legal entity or natural person using or requesting a publicly available electronic communications service;
- (i) 'consumer' means any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business or profession;
- (j) 'universal service' means the minimum set of services, defined in Directive 2002/22/EC (Universal Service Directive), of specified quality which is available to all users regardless of their geographical location and, in the light of specific national conditions, at an affordable price;
- (k) 'subscriber' means any natural person or legal entity who or which is party to a contract with the provider of publicly available electronic communications services for the supply of such services;
- (l) 'Specific Directives' means Directive 2002/20/EC (Authorisation Directive), Directive 2002/19/EC (Access Directive), Directive 2002/22/EC (Universal Service Directive) and Directive 97/66/EC;
- (m) 'provision of an electronic communications network' means the establishment, operation, control or making available of such a network;
- (n) 'end-user' means a user not providing public communications networks or publicly available electronic communications services.
- (o) 'enhanced digital television equipment' means set-top boxes intended for connection to television sets or integrated digital television sets, able to receive digital interactive television services;
- (p) 'application program interface (API)' means the software interfaces between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services.

## CHAPTER II

## NATIONAL REGULATORY AUTHORITIES

## Article 3

## National regulatory authorities

1. Member States shall ensure that each of the tasks assigned to national regulatory authorities in this Directive and the Specific Directives is undertaken by a competent body.
2. Member States shall guarantee the independence of national regulatory authorities by ensuring that they are legally distinct from and functionally independent of all organisations providing electronic communications networks, equipment or services. Member States that retain ownership or control of undertakings providing electronic communications networks and/or services shall ensure effective structural separation of the regulatory function from activities associated with ownership or control.
3. Member States shall ensure that national regulatory authorities exercise their powers impartially and transparently.
4. Member States shall publish the tasks to be undertaken by national regulatory authorities in an easily accessible form, in particular where those tasks are assigned to more than one

body. Member States shall ensure, where appropriate, consultation and cooperation between those authorities, and between those authorities and national authorities entrusted with the implementation of competition law and national authorities entrusted with the implementation of consumer law, on matters of common interest. Where more than one authority has competence to address such matters, Member States shall ensure that the respective tasks of each authority are published in an easily accessible form.

5. National regulatory authorities and national competition authorities shall provide each other with the information necessary for the application of the provisions of this Directive and the Specific Directives. In respect of the information exchanged, the receiving authority shall ensure the same level of confidentiality as the originating authority.

6. Member States shall notify to the Commission all national regulatory authorities assigned tasks under this Directive and the Specific Directives, and their respective responsibilities.

#### Article 4

### Right of appeal

1. Member States shall ensure that effective mechanisms exist at national level under which any user or undertaking providing electronic communications networks and/or services who is affected by a decision of a national regulatory authority has the right of appeal against the decision to an appeal body that is independent of the parties involved. This body, which may be a court, shall have the appropriate expertise available to it to enable it to carry out its functions. Member States shall ensure that the merits of the case are duly taken into account and that there is an effective appeal mechanism. Pending the outcome of any such appeal, the decision of the national regulatory authority shall stand, unless the appeal body decides otherwise.

2. Where the appeal body referred to in paragraph 1 is not judicial in character, written reasons for its decision shall always be given. Furthermore, in such a case, its decision shall be subject to review by a court or tribunal within the meaning of Article 234 of the Treaty.

#### Article 5

### Provision of information

1. Member States shall ensure that undertakings providing electronic communications networks and services provide all the information, including financial information, necessary for national regulatory authorities to ensure conformity with the provisions of, or decisions made in accordance with, this Directive and the Specific Directives. These undertakings shall provide such information promptly on request and to the

timescales and level of detail required by the national regulatory authority. The information requested by the national regulatory authority shall be proportionate to the performance of that task. The national regulatory authority shall give the reasons justifying its request for information.

2. Member States shall ensure that national regulatory authorities provide the Commission, after a reasoned request, with the information necessary for it to carry out its tasks under the Treaty. The information requested by the Commission shall be proportionate to the performance of those tasks. Where the information provided refers to information previously provided by undertakings at the request of the national regulatory authority, such undertakings shall be informed thereof. To the extent necessary, and unless the authority that provides the information has made an explicit and reasoned request to the contrary, the Commission shall make the information provided available to another such authority in another Member State.

Subject to the requirements of paragraph 3, Member States shall ensure that the information submitted to one national regulatory authority can be made available to another such authority in the same or different Member State, after a substantiated request, where necessary to allow either authority to fulfil its responsibilities under Community law.

3. Where information is considered confidential by a national regulatory authority in accordance with Community and national rules on business confidentiality, the Commission and the national regulatory authorities concerned shall ensure such confidentiality.

4. Member States shall ensure that, acting in accordance with national rules on public access to information and subject to Community and national rules on business confidentiality, national regulatory authorities publish such information as would contribute to an open and competitive market.

5. National regulatory authorities shall publish the terms of public access to information as referred to in paragraph 4, including procedures for obtaining such access.

#### Article 6

### Consultation and transparency mechanism

Except in cases falling within Articles 7(6), 20 or 21 Member States shall ensure that where national regulatory authorities intend to take measures in accordance with this Directive or the Specific Directives which have a significant impact on the relevant market, they give interested parties the opportunity to comment on the draft measure within a reasonable period. National regulatory authorities shall publish their national

consultation procedures. Member States shall ensure the establishment of a single information point through which all current consultations can be accessed. The results of the consultation procedure shall be made publicly available by the national regulatory authority, except in the case of confidential information in accordance with Community and national law on business confidentiality.

#### Article 7

### Consolidating the internal market for electronic communications

1. In carrying out their tasks under this Directive and the Specific Directives, national regulatory authorities shall take the utmost account of the objectives set out in Article 8, including in so far as they relate to the functioning of the internal market.

2. National regulatory authorities shall contribute to the development of the internal market by cooperating with each other and with the Commission in a transparent manner to ensure the consistent application, in all Member States, of the provisions of this Directive and the Specific Directives. To this end, they shall, in particular, seek to agree on the types of instruments and remedies best suited to address particular types of situations in the market place.

3. In addition to the consultation referred to in Article 6, where a national regulatory authority intends to take a measure which:

(a) falls within the scope of Articles 15 or 16 of this Directive, Articles 5 or 8 of Directive 2002/19/EC (Access Directive) or Article 16 of Directive 2002/22/EC (Universal Service Directive), and

(b) would affect trade between Member States,

it shall at the same time make the draft measure accessible to the Commission and the national regulatory authorities in other Member States, together with the reasoning on which the measure is based, in accordance with Article 5(3), and inform the Commission and other national regulatory authorities thereof. National regulatory authorities and the Commission may make comments to the national regulatory authority concerned only within one month or within the period referred to in Article 6 if that period is longer. The one-month period may not be extended.

4. Where an intended measure covered by paragraph 3 aims at:

(a) defining a relevant market which differs from those defined in the recommendation in accordance with Article 15(1), or

(b) deciding whether or not to designate an undertaking as having, either individually or jointly with others, significant market power, under Article 16(3), (4) or (5),

and would affect trade between Member States and the Commission has indicated to the national regulatory authority that it considers that the draft measure would create a barrier to the single market or if it has serious doubts as to its compatibility with Community law and in particular the objectives referred to in Article 8, then the draft measure shall not be adopted for a further two months. This period may not be extended. Within this period the Commission may, in accordance with the procedure referred to in Article 22(2), take a decision requiring the national regulatory authority concerned to withdraw the draft measure. This decision shall be accompanied by a detailed and objective analysis of why the Commission considers that the draft measure should not be adopted together with specific proposals for amending the draft measure.

5. The national regulatory authority concerned shall take the utmost account of comments of other national regulatory authorities and the Commission and may, except in cases covered by paragraph 4, adopt the resulting draft measure and, where it does so, shall communicate it to the Commission.

6. In exceptional circumstances, where a national regulatory authority considers that there is an urgent need to act, by way of derogation from the procedure set out in paragraphs 3 and 4, in order to safeguard competition and protect the interests of users, it may immediately adopt proportionate and provisional measures. It shall, without delay, communicate those measures, with full reasons, to the Commission and the other national regulatory authorities. A decision by the national regulatory authority to render such measures permanent or extend the time for which they are applicable shall be subject to the provisions of paragraphs 3 and 4.

#### CHAPTER III

### TASKS OF NATIONAL REGULATORY AUTHORITIES

#### Article 8

### Policy objectives and regulatory principles

1. Member States shall ensure that in carrying out the regulatory tasks specified in this Directive and the Specific Directives, the national regulatory authorities take all reasonable measures which are aimed at achieving the objectives set out in paragraphs 2, 3 and 4. Such measures shall be proportionate to those objectives.

Member States shall ensure that in carrying out the regulatory tasks specified in this Directive and the Specific Directives, in

particular those designed to ensure effective competition, national regulatory authorities take the utmost account of the desirability of making regulations technologically neutral.

National regulatory authorities may contribute within their competencies to ensuring the implementation of policies aimed at the promotion of cultural and linguistic diversity, as well as media pluralism.

2. The national regulatory authorities shall promote competition in the provision of electronic communications networks, electronic communications services and associated facilities and services by *inter alia*:

- (a) ensuring that users, including disabled users, derive maximum benefit in terms of choice, price, and quality;
- (b) ensuring that there is no distortion or restriction of competition in the electronic communications sector;
- (c) encouraging efficient investment in infrastructure, and promoting innovation; and
- (d) encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources.

3. The national regulatory authorities shall contribute to the development of the internal market by *inter alia*:

- (a) removing remaining obstacles to the provision of electronic communications networks, associated facilities and services and electronic communications services at European level;
- (b) encouraging the establishment and development of trans-European networks and the interoperability of pan-European services, and end-to-end connectivity;
- (c) ensuring that, in similar circumstances, there is no discrimination in the treatment of undertakings providing electronic communications networks and services;
- (d) cooperating with each other and with the Commission in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of this Directive and the Specific Directives.

4. The national regulatory authorities shall promote the interests of the citizens of the European Union by *inter alia*:

- (a) ensuring all citizens have access to a universal service specified in Directive 2002/22/EC (Universal Service Directive);
- (b) ensuring a high level of protection for consumers in their dealings with suppliers, in particular by ensuring the

availability of simple and inexpensive dispute resolution procedures carried out by a body that is independent of the parties involved;

- (c) contributing to ensuring a high level of protection of personal data and privacy;
- (d) promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services;
- (e) addressing the needs of specific social groups, in particular disabled users; and
- (f) ensuring that the integrity and security of public communications networks are maintained.

#### Article 9

#### Management of radio frequencies for electronic communications services

1. Member States shall ensure the effective management of radio frequencies for electronic communication services in their territory in accordance with Article 8. They shall ensure that the allocation and assignment of such radio frequencies by national regulatory authorities are based on objective, transparent, non-discriminatory and proportionate criteria.

2. Member States shall promote the harmonisation of use of radio frequencies across the Community, consistent with the need to ensure effective and efficient use thereof and in accordance with the Decision No 676/2002/EC (Radio Spectrum Decision).

3. Member States may make provision for undertakings to transfer rights to use radio frequencies with other undertakings.

4. Member States shall ensure that an undertaking's intention to transfer rights to use radio frequencies is notified to the national regulatory authority responsible for spectrum assignment and that any transfer takes place in accordance with procedures laid down by the national regulatory authority and is made public. National regulatory authorities shall ensure that competition is not distorted as a result of any such transaction. Where radio frequency use has been harmonised through the application of Decision No 676/2002/EC (Radio Spectrum Decision) or other Community measures, any such transfer shall not result in change of use of that radio frequency.

#### Article 10

#### Numbering, naming and addressing

1. Member States shall ensure that national regulatory authorities control the assignment of all national numbering

resources and the management of the national numbering plans. Member States shall ensure that adequate numbers and numbering ranges are provided for all publicly available electronic communications services. National regulatory authorities shall establish objective, transparent and non-discriminatory assigning procedures for national numbering resources.

2. National regulatory authorities shall ensure that numbering plans and procedures are applied in a manner that gives equal treatment to all providers of publicly available electronic communications services. In particular, Member States shall ensure that an undertaking allocated a range of numbers does not discriminate against other providers of electronic communications services as regards the number sequences used to give access to their services.

3. Member States shall ensure that the national numbering plans, and all subsequent additions or amendments thereto, are published, subject only to limitations imposed on the grounds of national security.

4. Member States shall support the harmonisation of numbering resources within the Community where that is necessary to support the development of pan European services. The Commission may, in accordance with the procedure referred to in Article 22(3), take the appropriate technical implementing measures on this matter.

5. Where this is appropriate in order to ensure full global interoperability of services, Member States shall coordinate their positions in international organisations and forums in which decisions are taken on issues relating to the numbering, naming and addressing of electronic communications networks and services.

#### Article 11

##### Rights of way

1. Member States shall ensure that when a competent authority considers:

— an application for the granting of rights to install facilities on, over or under public or private property to an undertaking authorised to provide public communications networks, or

— an application for the granting of rights to install facilities on, over or under public property to an undertaking authorised to provide electronic communications networks other than to the public,

the competent authority:

— acts on the basis of transparent and publicly available procedures, applied without discrimination and without delay, and

— follows the principles of transparency and non-discrimination in attaching conditions to any such rights.

The abovementioned procedures can differ depending on whether the applicant is providing public communications networks or not.

2. Member States shall ensure that where public or local authorities retain ownership or control of undertakings operating electronic communications networks and/or services, there is effective structural separation of the function responsible for granting the rights referred to in paragraph 1 from activities associated with ownership or control.

3. Member States shall ensure that effective mechanisms exist to allow undertakings to appeal against decisions on the granting of rights to install facilities to a body that is independent of the parties involved.

#### Article 12

##### Co-location and facility sharing

1. Where an undertaking providing electronic communications networks has the right under national legislation to install facilities on, over or under public or private property, or may take advantage of a procedure for the expropriation or use of property, national regulatory authorities shall encourage the sharing of such facilities or property.

2. In particular where undertakings are deprived of access to viable alternatives because of the need to protect the environment, public health, public security or to meet town and country planning objectives, Member States may impose the sharing of facilities or property (including physical co-location) on an undertaking operating an electronic communications network or take measures to facilitate the coordination of public works only after an appropriate period of public consultation during which all interested parties must be given an opportunity to express their views. Such sharing or coordination arrangements may include rules for apportioning the costs of facility or property sharing.

#### Article 13

##### Accounting separation and financial reports

1. Member States shall require undertakings providing public communications networks or publicly available electronic communications services which have special or exclusive rights for the provision of services in other sectors in the same or another Member State to:

- (a) keep separate accounts for the activities associated with the provision of electronic communications networks or services, to the extent that would be required if these activities were carried out by legally independent companies, so as to identify all elements of cost and revenue, with the basis of their calculation and the detailed attribution methods used, related to their activities associated with the provision of electronic communications networks or services including an itemised breakdown of fixed asset and structural costs, or
- (b) have structural separation for the activities associated with the provision of electronic communications networks or services.

Member States may choose not to apply the requirements referred to in the first subparagraph to undertakings the annual turnover of which in activities associated with electronic communications networks or services in the Member States is less than EUR 50 million.

2. Where undertakings providing public communications networks or publicly available electronic communications services are not subject to the requirements of company law and do not satisfy the small and medium-sized enterprise criteria of Community law accounting rules, their financial reports shall be drawn up and submitted to independent audit and published. The audit shall be carried out in accordance with the relevant Community and national rules.

This requirement shall also apply to the separate accounts required under paragraph 1(a).

#### CHAPTER IV

#### GENERAL PROVISIONS

##### Article 14

#### Undertakings with significant market power

1. Where the Specific Directives require national regulatory authorities to determine whether operators have significant market power in accordance with the procedure referred to in Article 16, paragraphs 2 and 3 of this Article shall apply.
2. An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

In particular, national regulatory authorities shall, when assessing whether two or more undertakings are in a joint dominant position in a market, act in accordance with Community law and take into the utmost account the guidelines on market analysis and the assessment of significant market power published by the Commission pursuant to

Article 15. Criteria to be used in making such an assessment are set out in Annex II.

3. Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.

##### Article 15

#### Market definition procedure

1. After public consultation and consultation with national regulatory authorities the Commission shall adopt a recommendation on relevant product and service markets (hereinafter 'the recommendation'). The recommendation shall identify in accordance with Annex I hereto those product and service markets within the electronic communications sector, the characteristics of which may be such as to justify the imposition of regulatory obligations set out in the Specific Directives, without prejudice to markets that may be defined in specific cases under competition law. The Commission shall define markets in accordance with the principles of competition law.

The Commission shall regularly review the recommendation.

2. The Commission shall publish, at the latest on the date of entry into force of this Directive, guidelines for market analysis and the assessment of significant market power (hereinafter 'the guidelines') which shall be in accordance with the principles of competition law.

3. National regulatory authorities shall, taking the utmost account of the recommendation and the guidelines, define relevant markets appropriate to national circumstances, in particular relevant geographic markets within their territory, in accordance with the principles of competition law. National regulatory authorities shall follow the procedures referred to in Articles 6 and 7 before defining the markets that differ from those defined in the recommendation.

4. After consultation with national regulatory authorities the Commission may, acting in accordance with the procedure referred to in Article 22(3), adopt a Decision identifying transnational markets.

##### Article 16

#### Market analysis procedure

1. As soon as possible after the adoption of the recommendation or any updating thereof, national regulatory authorities shall carry out an analysis of the relevant markets,

taking the utmost account of the guidelines. Member States shall ensure that this analysis is carried out, where appropriate, in collaboration with the national competition authorities.

2. Where a national regulatory authority is required under Articles 16, 17, 18 or 19 of Directive 2002/22/EC (Universal Service Directive), or Articles 7 or 8 of Directive 2002/19/EC (Access Directive) to determine whether to impose, maintain, amend or withdraw obligations on undertakings, it shall determine on the basis of its market analysis referred to in paragraph 1 of this Article whether a relevant market is effectively competitive.

3. Where a national regulatory authority concludes that the market is effectively competitive, it shall not impose or maintain any of the specific regulatory obligations referred to in paragraph 2 of this Article. In cases where sector specific regulatory obligations already exist, it shall withdraw such obligations placed on undertakings in that relevant market. An appropriate period of notice shall be given to parties affected by such a withdrawal of obligations.

4. Where a national regulatory authority determines that a relevant market is not effectively competitive, it shall identify undertakings with significant market power on that market in accordance with Article 14 and the national regulatory authority shall on such undertakings impose appropriate specific regulatory obligations referred to in paragraph 2 of this Article or maintain or amend such obligations where they already exist.

5. In the case of transnational markets identified in the Decision referred to in Article 15(4), the national regulatory authorities concerned shall jointly conduct the market analysis taking the utmost account of the guidelines and decide on any imposition, maintenance, amendment or withdrawal of regulatory obligations referred to in paragraph 2 of this Article in a concerted fashion.

6. Measures taken according to the provisions of paragraphs 3, 4 and 5 of this Article shall be subject to the procedures referred to in Articles 6 and 7.

#### Article 17

#### Standardisation

1. The Commission, acting in accordance with the procedure referred to in Article 22(2), shall draw up and publish in the *Official Journal of the European Communities* a list of standards and/or specifications to serve as a basis for encouraging the harmonised provision of electronic communications networks, electronic communications services and associated facilities and services. Where necessary, the Commission may, acting in accordance with the procedure referred to in Article 22(2) and following consultation of the Committee established by Directive 98/34/EC, request that standards be drawn up by the European standards organisations (European Committee for Standardisation (CEN), European Committee for Electrotechnical Standardisation (CENELEC), and European Telecommunications Standards Institute (ETSI)).

2. Member States shall encourage the use of the standards and/or specifications referred to in paragraph 1, for the provision of services, technical interfaces and/or network functions, to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.

As long as standards and/or specifications have not been published in accordance with paragraph 1, Member States shall encourage the implementation of standards and/or specifications adopted by the European standards organisations.

In the absence of such standards and/or specifications, Member States shall encourage the implementation of international standards or recommendations adopted by the International Telecommunication Union (ITU), the International Organisation for Standardisation (ISO) or the International Electrotechnical Commission (IEC).

Where international standards exist, Member States shall encourage the European standards organisations to use them, or the relevant parts of them, as a basis for the standards they develop, except where such international standards or relevant parts would be ineffective.

3. If the standards and/or specifications referred to in paragraph 1 have not been adequately implemented so that interoperability of services in one or more Member States cannot be ensured, the implementation of such standards and/or specifications may be made compulsory under the procedure laid down in paragraph 4, to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users.

4. Where the Commission intends to make the implementation of certain standards and/or specifications compulsory, it shall publish a notice in the *Official Journal of the European Communities* and invite public comment by all parties concerned. The Commission, acting in accordance with the procedure referred to in Article 22(3), shall make implementation of the relevant standards compulsory by making reference to them as compulsory standards in the list of standards and/or specifications published in the *Official Journal of the European Communities*.

5. Where the Commission considers that standards and/or specifications referred to in paragraph 1 no longer contribute to the provision of harmonised electronic communications services, or that they no longer meet consumers' needs or are hampering technological development, it shall, acting in accordance with the procedure referred to in Article 22(2), remove them from the list of standards and/or specifications referred to in paragraph 1.

6. Where the Commission considers that standards and/or specifications referred to in paragraph 4 no longer contribute to the provision of harmonised electronic communications services, or that they no longer meet consumers' needs or are hampering technological development, it shall, acting in



accordance with the procedure referred to in Article 22(3), remove them from this list of standards and/or specifications referred to in paragraph 1.

7. This Article does not apply in respect of any of the essential requirements, interface specifications or harmonised standards to which the provisions of Directive 1999/5/EC apply.

#### Article 18

##### Interoperability of digital interactive television services

1. In order to promote the free flow of information, media pluralism and cultural diversity, Member States shall encourage, in accordance with the provisions of Article 17(2):

- (a) providers of digital interactive television services for distribution to the public in the Community on digital interactive television platforms, regardless of the transmission mode, to use an open API;
- (b) providers of all enhanced digital television equipment deployed for the reception of digital interactive television services on interactive digital television platforms to comply with an open API in accordance with the minimum requirements of the relevant standards or specifications.

2. Without prejudice to Article 5(1)(b) of Directive 2002/19/EC (Access Directive), Member States shall encourage proprietors of APIs to make available on fair, reasonable and non-discriminatory terms, and against appropriate remuneration, all such information as is necessary to enable providers of digital interactive television services to provide all services supported by the API in a fully functional form.

3. Within one year after the date of application referred to in Article 28(1), second subparagraph, the Commission shall examine the effects of this Article. If interoperability and freedom of choice for users have not been adequately achieved in one or more Member States, the Commission may take action in accordance with the procedure laid down in Article 17(3) and (4).

#### Article 19

##### Harmonisation procedures

1. Where the Commission, acting in accordance with the procedure referred to in Article 22(2), issues recommendations to Member States on the harmonised application of the provisions in this Directive and the Specific Directives in order to further the achievement of the objectives set out in Article 8, Member States shall ensure that national regulatory authorities take the utmost account of those recommendations in carrying out their tasks. Where a national regulatory authority chooses not to follow a recommendation, it shall inform the Commission giving the reasoning for its position.

2. Where the Commission finds that divergence at national level in regulations aimed at implementing Article 10(4) creates a barrier to the single market, the Commission may, acting in accordance with the procedure referred to in Article 22(3), take the appropriate technical implementing measures.

#### Article 20

##### Dispute resolution between undertakings

1. In the event of a dispute arising in connection with obligations arising under this Directive or the Specific Directives between undertakings providing electronic communications networks or services in a Member State, the national regulatory authority concerned shall, at the request of either party, and without prejudice to the provisions of paragraph 2, issue a binding decision to resolve the dispute in the shortest possible time frame and in any case within four months except in exceptional circumstances. The Member State concerned shall require that all parties cooperate fully with the national regulatory authority.

2. Member States may make provision for national regulatory authorities to decline to resolve a dispute through a binding decision where other mechanisms, including mediation, exist and would better contribute to resolution of the dispute in a timely manner in accordance with the provisions of Article 8. The national regulatory authority shall inform the parties without delay. If after four months the dispute is not resolved, and if the dispute has not been brought before the courts by the party seeking redress, the national regulatory authority shall issue, at the request of either party, a binding decision to resolve the dispute in the shortest possible time frame and in any case within four months.

3. In resolving a dispute, the national regulatory authority shall take decisions aimed at achieving the objectives set out in Article 8. Any obligations imposed on an undertaking by the national regulatory authority in resolving a dispute shall respect the provisions of this Directive or the Specific Directives.

4. The decision of the national regulatory authority shall be made available to the public, having regard to the requirements of business confidentiality. The parties concerned shall be given a full statement of the reasons on which it is based.

5. The procedure referred to in paragraphs 1, 3 and 4 shall not preclude either party from bringing an action before the courts.

#### Article 21

##### Resolution of cross-border disputes

1. In the event of a cross-border dispute arising under this Directive or the Specific Directives between parties in different

Member States, where the dispute lies within the competence of national regulatory authorities from more than one Member State, the procedure set out in paragraphs 2, 3 and 4 shall be applicable.

2. Any party may refer the dispute to the national regulatory authorities concerned. The national regulatory authorities shall coordinate their efforts in order to bring about a resolution of the dispute, in accordance with the objectives set out in Article 8. Any obligations imposed on an undertaking by the national regulatory authority in resolving a dispute shall respect the provisions of this Directive or the Specific Directives.

3. Member States may make provision for national regulatory authorities jointly to decline to resolve a dispute where other mechanisms, including mediation, exist and would better contribute to resolution of the dispute in a timely manner in accordance with the provisions of Article 8. They shall inform the parties without delay. If after four months the dispute is not resolved, if the dispute has not been brought before the courts by the party seeking redress, and if either party requests it, the national regulatory authorities shall coordinate their efforts in order to bring about a resolution of the dispute, in accordance with the provisions set out in Article 8.

4. The procedure referred to in paragraph 2 shall not preclude either party from bringing an action before the courts.

#### Article 22

#### Committee

1. The Commission shall be assisted by a Committee ('the Communications Committee').

2. Where reference is made to this paragraph, Articles 3 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

3. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be three months.

4. The Committee shall adopt its rules of procedure.

#### Article 23

#### Exchange of information

1. The Commission shall provide all relevant information to the Communications Committee on the outcome of regular consultations with the representatives of network operators, service providers, users, consumers, manufacturers and trade unions, as well as third countries and international organisations.

2. The Communications Committee shall, taking account of the Community's electronic communications policy, foster the exchange of information between the Member States and between the Member States and the Commission on the situation and the development of regulatory activities regarding electronic communications networks and services.

#### Article 24

#### Publication of information

1. Member States shall ensure that up-to-date information pertaining to the application of this Directive and the Specific Directives is made publicly available in a manner that guarantees all interested parties easy access to that information. They shall publish a notice in their national official gazette describing how and where the information is published. The first such notice shall be published before the date of application referred to in Article 28(1), second subparagraph, and thereafter a notice shall be published whenever there is any change in the information contained therein.

2. Member States shall send to the Commission a copy of all such notices at the time of publication. The Commission shall distribute the information to the Communications Committee as appropriate.

#### Article 25

#### Review procedures

1. The Commission shall periodically review the functioning of this Directive and report to the European Parliament and to the Council, on the first occasion not later than three years after the date of application referred to in Article 28(1), second subparagraph. For this purpose, the Commission may request information from the Member States, which shall be supplied without undue delay.

#### CHAPTER V

#### FINAL PROVISIONS

#### Article 26

#### Repeal

The following Directives and Decisions are hereby repealed with effect from the date of application referred to in Article 28(1), second subparagraph:

— Directive 90/387/EEC,

- Council Decision 91/396/EEC of 29 July 1991 on the introduction of a single European emergency call number <sup>(1)</sup>,
- Council Directive 92/44/EEC of 5 June 1992 on the application of open network provision to leased lines <sup>(2)</sup>,
- Council Decision 92/264/EEC of 11 May 1992 on the introduction of a standard international telephone access code in the Community <sup>(3)</sup>,
- Directive 95/47/EC,
- Directive 97/13/EC,
- Directive 97/33/EC,
- Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment <sup>(4)</sup>.

#### Article 27

#### Transitional measures

Member States shall maintain all obligations under national law referred to in Article 7 of Directive 2002/19/EC (Access Directive) and Article 16 of Directive 2002/22/EC (Universal Service Directive) until such time as a determination is made in respect of those obligations by a national regulatory authority in accordance with Article 16 of this Directive.

Operators of fixed public telephone networks that were designated by their national regulatory authority as having significant market power in the provision of fixed public telephone networks and services under Annex I, Part 1 of Directive 97/33/EC or Directive 98/10/EC shall continue to be considered 'notified operators' for the purposes of Regulation (EC) No 2887/2000 until such a time as the market analysis procedure referred to in Article 16 has been completed. Thereafter they shall cease to be considered 'notified operators' for the purposes of the Regulation.

#### Article 28

#### Transposition

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive not later than 24 July 2003. They shall forthwith inform the Commission thereof.

They shall apply those measures from 25 July 2003.

2. When Member States adopt these measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

3. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field governed by this Directive and of any subsequent amendments to those provisions.

#### Article 29

#### Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

#### Article 30

#### Addressees

This Directive is addressed to the Member States.

Done at Brussels, 7 March 2002.

*For the European Parliament*

*The President*

P. COX

*For the Council*

*The President*

J. C. APARICIO

<sup>(1)</sup> OJ L 217, 6.8.1991, p. 31.

<sup>(2)</sup> OJ L 165, 19.6.1992, p. 27. Directive as last amended by Commission Decision 98/80/EC (OJ L 14, 20.1.1998, p. 27).

<sup>(3)</sup> OJ L 137, 20.5.1992, p. 21.

<sup>(4)</sup> OJ L 101, 1.4.1998, p. 24.

## ANNEX I

**List of markets to be included in the initial Commission recommendation on relevant product and service markets referred to in Article 15**1. *Markets referred to in Directive 2002/22/EC (Universal Service Directive)*

Article 16 — Markets defined under the former regulatory framework, where obligations should be reviewed.

The provision of connection to and use of the public telephone network at fixed locations.

The provision of leased lines to end users.

2. *Markets referred to in Directive 2002/19/EC (Access Directive)*

Article 7 — Markets defined under the former regulatory framework, where obligations should be reviewed.

Interconnection (Directive 97/33/EC)

call origination in the fixed public telephone network

call termination in the fixed public telephone network

transit services in the fixed public telephone network

call origination on public mobile telephone networks

call termination on public mobile telephone networks

leased line interconnection (interconnection of part circuits)

Network access and special network access (Directive 97/33/EC, Directive 98/10/EC)

access to the fixed public telephone network, including unbundled access to the local loop

access to public mobile telephone networks, including carrier selection

Wholesale leased line capacity (Directive 92/44/EEC)

wholesale provision of leased line capacity to other suppliers of electronic communications networks or services

3. *Markets referred to in Regulation (EC) No 2887/2000*

Services provided over unbundled (twisted metallic pair) loops.

4. *Additional markets*

The national market for international roaming services on public mobile telephone networks.

## ANNEX II

**Criteria to be used by national regulatory authorities in making an assessment of joint dominance in accordance with Article 14(2), second subparagraph**

Two or more undertakings can be found to be in a joint dominant position within the meaning of Article 14 if, even in the absence of structural or other links between them, they operate in a market the structure of which is considered to be conducive to coordinated effects. Without prejudice to the case law of the Court of Justice on joint dominance, this is likely to be the case where the market satisfies a number of appropriate characteristics, in particular in terms of market concentration, transparency and other characteristics mentioned below:

- mature market,
- stagnant or moderate growth on the demand side,
- low elasticity of demand,
- homogeneous product,
- similar cost structures,
- similar market shares,
- lack of technical innovation, mature technology,
- absence of excess capacity,
- high barriers to entry,
- lack of countervailing buying power,
- lack of potential competition,
- various kinds of informal or other links between the undertakings concerned,
- retaliatory mechanisms,
- lack or reduced scope for price competition.

The above is not an exhaustive list, nor are the criteria cumulative. Rather, the list is intended to illustrate only the sorts of evidence that could be used to support assertions concerning the existence of joint dominance.

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**Federal Communications Commission**

**FCC 05-151**

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matters of	)	
	)	
Appropriate Framework for Broadband Access to the Internet over Wireline Facilities	)	CC Docket No. 02-33
	)	
Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services	)	CC Docket No. 01-337
	)	
Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements	)	CC Docket Nos. 95-20, 98-10
	)	
Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities	)	GN Docket No. 00-185
	)	
Internet Over Cable Declaratory Ruling	)	
	)	
Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities	)	CS Docket No. 02-52
	)	

**POLICY STATEMENT**

**Adopted: August 5, 2005**

**Released: September 23, 2005**

By the Commission:

**I. INTRODUCTION**

1. The availability of the Internet has had a profound impact on American life. This network of networks has fundamentally changed the way we communicate.<sup>1</sup> It has increased the speed of

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<sup>1</sup> The Internet is “the international computer network of both Federal and non-Federal interoperable packet switched data networks.” 47 U.S.C. § 230(f)(1). The Internet is also described as “the combination of computer facilities and electromagnetic transmission media, and related equipment and software, comprising the interconnected worldwide network of computer networks that employ the Transmission Control Protocol/Internet Protocol or any successor protocol to transmit information.” 47 U.S.C. § 231(e)(3). The Supreme Court has described the Internet as a “network of interconnected computers.” *National Cable & Telecommunications Ass’n v. Brand X Internet Services*, 125 S. Ct. 2688, slip op. at 2 (2005) (*NCTA v. Brand X*); see also *Reno v. ACLU*, 521 U.S. 844, 849-50 (1997). No single entity controls the Internet; rather it is a “worldwide mesh or matrix of hundreds of thousands of (continued . . .)

## Federal Communications Commission

FCC 05-151

communication, the range of communicating devices and the variety of platforms over which we can send and receive information.<sup>2</sup> As Congress has noted, “[t]he rapidly developing array of Internet . . . services available to individual Americans represent an extraordinary advance in the availability of educational and informational resources to our citizens.”<sup>3</sup> The Internet also represents “a forum for a true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity.”<sup>4</sup> In addition, the Internet plays an important role in the economy, as an engine for productivity growth and cost savings.<sup>5</sup>

2. In section 230(b) of the Communications Act of 1934, as amended (Communications Act or Act), Congress describes its national Internet policy. Specifically, Congress states that it is the policy of the United States “to preserve the vibrant and competitive free market that presently exists for the Internet”<sup>6</sup> and “to promote the continued development of the Internet.”<sup>7</sup> In section 706(a) of the Act, Congress charges the Commission with “encourag[ing] the deployment on a reasonable and timely basis of advanced telecommunications capability” – broadband – “to all Americans.”<sup>8</sup>

3. In this Policy Statement, the Commission offers guidance and insight into its approach to the Internet and broadband that is consistent with these Congressional directives.

## II. DISCUSSION

4. The Communications Act charges the Commission with “regulating interstate and foreign commerce in communication by wire and radio.”<sup>9</sup> The Communications Act regulates telecommunications carriers, as common carriers, under Title II.<sup>10</sup> Information service providers, “by contrast, are not subject to mandatory common-carrier regulation under Title II.”<sup>11</sup> The Commission, however, “has jurisdiction to impose additional regulatory obligations under its Title I ancillary

(continued from previous page) —————  
networks, owned and operated by hundreds of thousands of people.” John S. Quarterman & Peter H. Salus, *How the Internet Works*, <http://www.mids.org/works.html> (visited Dec. 17, 2003) (quoted at *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 19 FCC Rcd 4863, 4869 n.23 (2004) (*IP-Enabled Services NPRM*)).

<sup>2</sup> *IP-Enabled Services NPRM*, 19 FCC Rcd at 4869-70, para. 8.

<sup>3</sup> 47 U.S.C. § 230(a)(1).

<sup>4</sup> 47 U.S.C. § 230(a)(3).

<sup>5</sup> See, e.g., Hal Varian et al., *The Net Impact Study: The Projected Economic Benefits of the Internet in the United States, United Kingdom and Germany*, available at: [http://www.netimpactstudy.com/NetImpact\\_Study\\_Report.pdf](http://www.netimpactstudy.com/NetImpact_Study_Report.pdf) (January 2002) (visited July 31, 2005).

<sup>6</sup> 47 U.S.C. § 230(b)(2).

<sup>7</sup> 47 U.S.C. § 230(b)(1).

<sup>8</sup> 47 U.S.C. § 157 nt. (incorporating section 706 of the Telecommunications Act of 1996, Pub. Law No. 104-104, 110 Stat. 56 (1996)).

<sup>9</sup> 47 U.S.C. § 151.

<sup>10</sup> See *NCTA v. Brand X*, slip op. at 1.

<sup>11</sup> *Id.* at 3.

## Federal Communications Commission

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jurisdiction to regulate interstate and foreign communications.”<sup>12</sup> As a result, the Commission has jurisdiction necessary to ensure that providers of telecommunications for Internet access or Internet Protocol-enabled (IP-enabled) services are operated in a neutral manner. Moreover, to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers, the Commission adopts the following principles:

- *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to access the lawful Internet content of their choice.
- *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement.
- *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to connect their choice of legal devices that do not harm the network.<sup>13</sup>
- *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to competition among network providers, application and service providers, and content providers.<sup>14</sup>

### III. CONCLUSION

5. The Commission has a duty to preserve and promote the vibrant and open character of the Internet as the telecommunications marketplace enters the broadband age. To foster creation, adoption and use of Internet broadband content, applications, services and attachments, and to ensure consumers benefit from the innovation that comes from competition, the Commission will incorporate the above principles into its ongoing policymaking activities.<sup>15</sup>

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

<sup>12</sup> *Id.* at 3-4. We also note that the Enforcement Bureau recently entered into a consent decree to resolve an investigation with respect to the blocking of ports used for voice over Internet Protocol (VoIP). See *Madison River LLC and Affiliated Companies*, File No. EB-05-IH-0110, Order, 20 FCC Rcd 4295 (Enf. Bur. 2005).

<sup>13</sup> See *Hush-A-Phone Corp. v. United States*, 238 F.2d 266, 269 (D.C. Cir. 1956); *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420 (1968).

<sup>14</sup> See Preamble, Telecommunications Act of 1996, P.L. 104-104, 100 Stat. 56 (1996) (enacting 1996 Act “to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies”).

<sup>15</sup> Accordingly, we are not adopting rules in this policy statement. The principles we adopt are subject to reasonable network management.



Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554

In the Matter of )  
 )  
Skype Communications S.A.R.L. )  
 )  
Petition to Confirm A Consumer's Right ) RM - \_\_\_\_\_  
to Use Internet Communications Software )  
and Attach Devices to Wireless Networks )  
 )  
 )

PETITION TO CONFIRM A CONSUMER'S RIGHT TO USE INTERNET  
COMMUNICATIONS SOFTWARE AND ATTACH DEVICES TO WIRELESS  
NETWORKS

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Dated: February 20, 2007

## SUMMARY

As the wireless industry matures, consolidation and the relationship between handset manufacturers and carriers are producing market practices that raise substantial questions about whether consumers are receiving the maximum benefits of wireless competition. For example, carriers are beginning aggressively to influence software and product design to the detriment of consumers.

As the wireless market has matured and wireless handsets have become an integral part of most Americans' lives, carriers are using their considerable influence over handset design and usage to maintain control over and limit subscribers' right to run software communications applications of their choosing. Instead of carrying the subscribers' messages indifferent to content, carriers have exerted more and more control over the way consumers access the mobile Internet. In an effort to prefer their own affiliated services and exclude rivals, carriers have disabled or crippled consumer-friendly features of mobile devices. Carriers are doing so, moreover, in violation of the Commission's *Carterfone* principle and the strictures of the Commission's original order permitting the bundling of consumer equipment and wireless service. The Commission should act now to enforce *Carterfone* and unlock the full benefits of wireless price competition and innovation.

In light of these developments, Skype respectfully requests that the Commission make unmistakably clear that *Carterfone* will be enforced in the wireless industry, to initiate a proceeding to evaluate wireless carrier practices in light of *Carterfone*, and to create an industry-led mechanism to ensure the openness of wireless networks. Doing so will ensure both that consumers retain a right to run the applications of their choosing and attach all non-harmful devices to the wireless network. Finally, Commission involvement will ensure that carriers cannot use illegitimate network management practices as an excuse for otherwise anti-consumer behavior.

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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Skype Communications S.A.R.L.	)	
	)	
Petition to Confirm A Consumer's Right	)	RM - _____
to Use The Internet Communications	)	
Software Of Their Choice and Attach	)	
Non-Harmful Devices to Wireless	)	
Networks	)	

**PETITION TO CONFIRM A CONSUMER'S RIGHT TO USE INTERNET  
COMMUNICATIONS SOFTWARE AND ATTACH NON-HARMFUL  
DEVICES TO WIRELESS NETWORKS**

Skype Communications S.A.R.L. hereby submits this Petition to request enforcement of the Commission's *Carterfone* principle in the market for wireless communications and Internet access.

Wireless companies have succeeded in bringing a wide range of telephony services to market and have made commendable strides since the FCC first allocated spectrum to their use. Yet, as the wireless industry matures, carriers are beginning aggressively to influence software and product design to the detriment of consumers. Consolidation and the relationship between handset manufacturers and carriers are producing market practices that raise substantial questions about whether consumers are receiving the maximum benefits of wireless competition.

At the same time wireless carriers were building out their networks, the software industry was building out its capabilities by inventing applications that run on broadband platforms of every variety, including wireless. Whereas in the past services were inextricably tied to a particular transmission medium, applications like Skype have been uncoupled from the underlying Internet access network and can operate across heterogeneous broadband platforms.

In the wireless arena, however, carriers are using their considerable influence over handset design and usage to maintain an inextricable tying of applications to their transmission networks and are limiting subscribers' rights to run applications of their choosing. Carriers are doing so, moreover, in violation of the Commission's *Carterfone* principle and the strictures of the Commission's original order permitting the bundling of consumer equipment and wireless service.

In light of these developments, Skype respectfully requests that the Commission declare that *Carterfone* applies fully to wireless networks, to initiate a rulemaking proceeding to evaluate wireless carrier practices in light of *Carterfone* and to enforce *Carterfone*, and to create an industry-led mechanism to ensure the openness of wireless networks. Doing so will ensure both that consumers retain a right to run the applications of their choosing and a right to attach all non-harmful devices to the wireless network. These essential rights will prevent carriers from using illegitimate network management practices as an excuse for otherwise anti-consumer behavior.

The Commission should act now to enforce *Carterfone* and the requirement to maintain an open network to unlock the full benefits of wireless price competition and innovation. It has been almost 15 years since the Commission last took a comprehensive look at the wireless industry and its practices that impact the Commission's *Carterfone* rule. It is an understatement to say that much has changed in the interim; it is time for another look.

## I. INTRODUCTION AND SUMMARY

Consumers' access to wireless services has come a long way since the Commission's decision to allocate spectrum to mobile telephony in 1968.<sup>1</sup> Today, almost forty years later, and some twenty-five years since the first commercial cellular networks were authorized,<sup>2</sup> wireless telecommunications are an unquestioned success, providing mobile telephone service to well over 200 million subscribers.<sup>3</sup> Within the last few years, the number of wireless subscribers surpassed the number of subscribers of traditional, wireline

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<sup>1</sup> *An Inquiry Relative to the Future Use of the Frequency Band 806-960 MHz; and Amendment of Parts 2, 18, 21, 73, 74, 89, 91 and 93 of the Rules Relative to Operations in the Land Mobile Service Between 806 and 960 MHz*, Notice of Inquiry and Notice of Proposed Rulemaking, Docket No. 18262, 14 FCC 2d 311 (1968).

<sup>2</sup> *An Inquiry Into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems*, Report and Order, CC Docket No. 79-318, FCC 81-161, 86 FCC 2d 469 (1981).

<sup>3</sup> *Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Eleventh Report, WT Docket No. 06-17, FCC 06-142, at 96 (rel. Sep. 29, 2006) (Table 1, showing CTIA's estimate of the number of wireless subscribers nationwide) ("*Eleventh CMRS Competition Report*").

telephone service.<sup>4</sup> For many Americans, the wireless handset has become indispensable.<sup>5</sup> Increasingly, consumers are using wireless handsets not only for mobile voice service but for a range of Internet applications that have been customized to run on 3G handsets. These capabilities include mobile Internet calling, such as Skype, and an expanded array of mobile communications applications.

As the wireless market has matured and wireless handsets have become an integral part of most Americans' lives, the nature of the wireless carriers' relationship to their subscribers has changed, and not always for the better. Instead of carrying the subscribers' messages indifferent to content, carriers have exerted more and more control over the way consumers access the mobile Internet. In an effort to prefer their own affiliated services and exclude rivals, carriers have disabled or crippled consumer-friendly features of mobile devices, maximizing their financial advantage at consumers' expense.

The public interest policy issues presented by these carrier practices are not new. In its celebrated *Carterfone* decision, and in later proceedings to oversee wireless carrier consumer equipment bundling practices, the Commission evaluated whether wireless carriers might frustrate innovation or price

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<sup>4</sup> *Local Telephone Competition: Status as of June 30, 2006*, at 1 (Jan. 2007), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-270133A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-270133A1.pdf) (listing number of wireline and wireless telephone subscribers as of June 30, 2006 as 172 million and 217.4 million, respectively).

<sup>5</sup> See Roger Cheng, *Telecom Companies Pin Hopes on Developing Mobile Commerce*, Wall St. J. Apr. 17, 2006, at B6 (quoting the Chief Operating Officer of Sprint Nextel as saying "there are only three forgotten things consumers will return home for: a cellphone, a wallet or purse and keys.").



competition. A new inquiry into the carriers' restrictive practices is particularly relevant today, as carriers roll-out a third generation of wireless service. If policy is set correctly, the arrival of 3G services could offer tremendous new sources of price competition provided by entities such as Skype, which offer free or affordable voice calling through applications customized to run on mobile devices. Before anti-consumer practices take root and innovation suffers, the Commission should examine the policies that have guided the industry to date and determine if changes are required to keep wireless communications open to innovation and competition.

The relationship between wireless carriers and handset manufacturers is of increasing concern because a growing number of communications services are going mobile. Just as a growing number of consumers are cutting the cord,<sup>6</sup> we can expect that over time, some consumers will substitute 3G wireless Internet access for wired Internet access. Therefore, the time is right to set the basic rules of the road for that transition to ensure that the *Carterfone* principle is honored in the market for mobile communications and Internet access.

Skype requests that the Commission initiate a proceeding explicitly to enforce its *Carterfone* policy in the mobile communications and Internet age. The Commission's *Carterfone* policy allowed consumers to attach any device to the

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<sup>6</sup> See *Eleventh CMRS Competition Report* at 89-90, paras. 205-07 (citing various studies estimating that, in late 2005, approximately eight percent of U.S. households had given up their landlines in favor of wireless phones, twelve percent of wireless phone subscribers use their mobile phone as their only phone, and nearly twenty percent of recent wireless phone purchasers did not subscribe to landline service).

wireline network as long as it did not harm the network.<sup>7</sup> This led to an explosion of innovation in the market for customer premises equipment (CPE). That same principle, applied to Internet applications and other wireless devices, would liberate software innovation and free equipment manufacturers from unreasonable control by carriers, enabling them to incorporate a variety of features in handset. Most importantly, it would stand as an explicit endorsement that consumers have an unfettered right to run applications of their choosing. It would also be an explicit elaboration of the Commission's broadband policy, which establishes that consumers "are entitled to connect their choice of legal devices that do not harm the network" and that "consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement."<sup>8</sup>

As part of such review, the Commission should create a mechanism to increase wireless industry transparency. Doing so will help ensure that the Commission protects users' rights to run the Internet applications of their choosing.

In submitting this Petition, Skype recognizes that software applications such as Skype are part of an interdependent ecosystem of wireless carriers, mobile operating system (OS) developers and device manufacturers. These relationships are fast-moving and multi-dimensional. This Petition urges the

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<sup>7</sup> *Use of the Carterfone Device in Message Toll Telephone Service*, 13 FCC 2d 420, 424-25 (1968).

<sup>8</sup> *Broadband Policy Statement*, FCC 05-151, at 3. It should be noted that the Commission specifically cited *Carterfone* as support for the "attachment" principle of its broadband policy. *Id.* at n. 13.

Commission to act as it has done in similar situations,<sup>9</sup> in a manner that balances marketplace competition with meaningful government oversight.

Section II below discusses the background, the current market structure, and the need for action by the Commission. Section II.A discusses the history of the *Carterfone* principle and how it has fostered innovation in various contexts. Section II.B describes several restrictive practices by wireless carriers that raise questions about the nature of carriers' control over the market for wireless devices. Section II.C discusses the significant changes in the wireless marketplace since the Commission last examined the effect of carrier practices on the development of the handset market.

After establishing the need for Commission action, Section III requests the Commission to declare that wireless carrier services are subject to the *Carterfone* principle that consumers have the right to attach any non-harmful device of their choosing to the network and that this, by necessity, includes users' rights to run Internet applications of their choosing.

Having clarified that the principle of *Carterfone* applies to wireless carriers, Section IV asks the Commission enforce it by initiating a rulemaking proceeding to determine whether the wireless carriers' restrictive practices described in Section II.B are consistent with the carriers' full *Carterfone* obligations, including consumers' rights to use Internet communications software of their choosing. As

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<sup>9</sup> For example, the Commission has followed a model of industry standard-setting along with regulatory oversight in establishing compatibility between Cable TV and DTV receivers ("plug-and-play").

part of this proceeding, the Commission also should create an industry-led mechanism, discussed in Section V, to ensure the openness of wireless networks through transparent and neutral technical standards.

## **II. MARKET STRUCTURE AND THE NEED FOR COMMISSION ACTION**

The wireless industry remains the only widely-used communications network in which the network operators exercise effective control over the devices used by consumers. In other contexts, the Commission has applied a basic connectivity principle that limits the ability of network operators to leverage their control over the transmission network into the adjacent market for equipment and the software that runs on that equipment. This principle has led to innovative equipment markets as equipment manufacturers proceed with the assurance that any network-compatible device can compete in the marketplace based on its acceptance by consumers rather than the ability of manufacturers to strike deals with network operators. Likewise, software developers such as Skype are more able to offer innovative products because there is some level of assurance that applications will run as they have been designed. This principle of “innovation without permission” has enabled the Internet software industry to thrive.

**A. The Commission Has Consistently Applied A Policy of Enabling Consumers to Choose What Devices They Attach to the Network**

The basic connectivity principle discussed above was expressed almost forty years ago in the wireline telephone context in the Commission's *Carterfone* decision, which ended telephone carriers' exclusive control over the devices that consumers were allowed to "attach" to the network.<sup>10</sup> In the wired world, since *Carterfone*, consumers have the freedom to attach whatever devices they choose to their phone lines, as long as the device does no harm to the network. This is made possible by technical standards such as those of the RJ-11 telephone jack.

The freedom to attach non-harmful devices to the network was first at issue in the *Hush-a-Phone* case, filed almost six decades ago. In this case, the plaintiff challenged AT&T and other local phone company tariffs that "forbid attachment to the telephone of any device 'not furnished by the telephone company.'"<sup>11</sup> AT&T argued that in order to provide quality telephone service to the public, it needed to provide all equipment itself and prohibit any "foreign attachments." After eight years of litigation, the D.C. Circuit ordered that a telephone subscriber has the "right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental."<sup>12</sup>

The Commission later followed the precedent of *Hush-a-Phone* in the seminal *Carterfone* case, finding invalid a tariff that prohibited "the use of

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<sup>10</sup> 13 FCC 2d at 424-25.

<sup>11</sup> *Hush-a-Phone Corp. v. U.S.*, 238 F.2d 266, 267 (D.C. Cir. 1956).

<sup>12</sup> *Id.* at 269.

interconnected devices which do not adversely affect the telephone system.”<sup>13</sup>

Following *Carterfone*, the Commission progressively deregulated network attachments to allow users to connect any device that complied with a basic set of rules outlined in Part 68 of the Commission’s rules.

In the *Second Computer Inquiry* proceeding, the Commission extended the basic principle of *Carterfone* into the market for enhanced services, requiring that common carriers sell or lease CPE separate and apart from the carrier’s services.<sup>14</sup> In doing so, the Commission wanted to maximize consumer choice by ensuring that they have the ability to choose their own equipment and service packages to meet their needs.<sup>15</sup> The Commission noted that its reasoning “was an outgrowth of [its] *Hush-a-Phone* and *Carterfone* decisions which confirmed the existence of broad consumer rights under Section 201(b) and 202(a) of the Act.”<sup>16</sup> This decision, coupled with the technical standards of Part 68, left equipment manufacturers free to develop such things as the personal modem and then increasingly faster versions of the “Hayes compatible” modem, which in turn led to growing numbers of consumers accessing the Internet via dial-up ISPs.

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<sup>13</sup> 13 FCC 2d at 423. The Commission noted the “[t]he principle of *Hush-a-Phone* is directly applicable here, there being no material distinction between a foreign attachment such as *Hush-a-Phone* and an interconnection device such as the *Carterfone*, so far as the present problem is concerned.” *Id.* at 423-24.

<sup>14</sup> *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, Final Decision, 77 FCC 2d 384; *modified on recon.*, 84 FCC 2d 50 (1980); *further modified* 88 FCC 2d 512 (1981), *aff’d sub nom.*, *Computer and Communications Industry Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983), *aff’d on second further recon.*, FCC 84-190 (rel. May 4, 1984).

<sup>15</sup> 77 FCC 2d at 443, para. 149.

<sup>16</sup> *Id.* at 440, para. 142.

Given the positive effects of the *Carterfone* principle, Congress extended it beyond its original application in the telephone market. For example, as part of the Telecommunications Act of 1996, Congress established a policy of consumer choice in the market for set-top boxes or navigation devices. In passing Section 629 of the Communications Act, Congress required the Commission to work with industry standard-setting organizations to adopt regulations that ensured the competitive availability of set-top boxes and other equipment used to access video programming. The Commission was to ensure that equipment was to be made available from “manufacturers, retailers, and other vendors not affiliated with” the network operators.<sup>17</sup> In implementing Section 629, the Commission required network operators to cease integrating security and non-security functions in a single device, noting that such a rule would “facilitate the development and commercial availability of navigation devices by permitting a larger measure of portability among them, increasing the market base and facilitating volume production and hence lower costs”<sup>18</sup> and would “allow[] manufacturers to provide a diverse array of equipment.”<sup>19</sup> The context was different but the principle was pure *Carterfone*.<sup>20</sup>

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<sup>17</sup> 47 U.S.C. 549(a).

<sup>18</sup> *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, Report and Order, CS Docket No. 97-80, FCC 98-116, para. 49 (rel. June 24, 1998).

<sup>19</sup> *Id.*, para. 61.

<sup>20</sup> See FCC Sets “Aggressive” Schedule for Interoperable Cable Set-top Boxes, Comm. Daily (June 12, 1998) (“Acting [FCC] Cable Bureau Chief John Logan compared [the Commission’s set-top box] rules with the FCC’s ‘Carterfone’ principle, which said that any consumer telephone can be connected to the network as long as it doesn’t harm the

The innovation principle that is the foundation of the *Carterfone* rule can be described as “modularity” or the “end-to-end” principle – that is, any software designer or manufacturer can build a component of a finished service without seeking the permission of the network operator. In this environment, equipment manufacturers’ incentives are protected because they know they can reach consumers without worrying about whether the network operators will support their devices. This principle is widely recognized as enhancing competition, innovation, and consumer welfare.<sup>21</sup> Whereas in the past services were inextricably tied to the transmission medium, using an end-to-end architecture, applications like Skype have been uncoupled from the underlying Internet access medium. This paradigm shift requires the Commission to likewise shift its *Carterfone* principle to ensure that consumers have an unfettered right to run applications of their choosing.

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network.”)

<sup>21</sup> See, e.g., Ex Parte Submission by Prof. Lawrence Lessig & Prof. Timothy Wu, CS Docket No. 02-52 (Aug. 22, 2003) (discussing the benefits of the “end-to-end” principle and the crucial role the principle has played in the growth of the Internet); Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. Rev. 925 (2001); J.H. Saltzer et al., *End-to-End Arguments in System Design*, in *Innovations in Internetworking* 195 (Craig Partridge ed., 1988) (available at <http://web.mit.edu/Saltzer/www/publications/endtoend/endtoend.pdf>).



**B. Wireless Carriers are Engaging in Restrictive Practices That Are Not in the Public Interest<sup>22</sup>**

**1. Consumer Harm at the Device Layer**

Skype's device partners depend largely on carriers to sell their devices. For the vast majority of U.S. wireless consumers, carriers sell phones that are highly subsidized and mask the true cost of the device.<sup>23</sup> Consequently, the market for wireless devices is unusual and distorted. This market distortion is of increasing concern as handsets become more versatile and are used to access a broader array of functions and services. As long as consumers used wireless service only for simple voice calls, the fact that they were largely confined to using carrier-supplied equipment resulted in limited harm.

However, as innovative "smart phones" marry the versatility of computers with the convenience of mobile equipment, manufacturers are poised to equip handsets with Skype features but are reluctant to do so if such features threaten wireless carriers' established business model. Such a "permission-based" approach to innovation creates an innovation bottleneck, as equipment manufacturers are forced to design equipment based on what carriers will allow, not necessarily what consumers want and the state-of-the-art will permit.

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<sup>22</sup> Professor Tim Wu, of Columbia University Law School, has recently completed a comprehensive study of this issue in a paper entitled, "[Wireless Net Neutrality: Cellular Carterfone and Consumer Choice in Mobile Broadband](http://www.newamerica.net/programs/wireless_future)," available at [http://www.newamerica.net/programs/wireless\\_future](http://www.newamerica.net/programs/wireless_future)

<sup>23</sup> The existence of substantial handset subsidies is used by the industry to justify exorbitant early termination fees (ETFs). The industry seeks to justify ETFs largely by the need to recoup the initial handset subsidy. See Petition of the Cellular Telecommunications & Internet Association, filed March 15, 2005. ETFs are one more way in which the wireless industry restricts the ability consumers to choose among available wireless services, including those based upon Wi-Fi connectivity.

**a. Product Design and Feature Crippling**

A clear example of the problem of wireless carrier control of the device market was the marketing of the Nokia E62/E61 smartphone. The Nokia E61, a high-end e-mail device and phone seen as a competitor to the BlackBerry and Palm's Treo, was released in Europe in the summer of 2006 and received favorable reviews. In the United States, however, Cingular (now AT&T) was the exclusive vendor of a stripped-down model known as the E62 – a crippled model which lacked, among other features, Wi-Fi connectivity, a feature that is increasingly popular among on-the-go consumers. One reviewer described the difference between the E62 and the E61 as follows:

The E61 also can do Wi-Fi. That means it can do lots of things without having to connect to a cellular phone network. What some carriers fear most is the E61's ability to handle VoIP calls when you're near a friendly wireless network. That's why we won't see Wi-Fi on the E62.<sup>24</sup>

The Nokia smartphone marketed in the United States was stripped of a consumer-friendly feature for reasons that are unrelated to any harm that may be caused to the network. Intentionally removing Wi-Fi functionality from the Nokia E62 interferes with a consumer's ability to place Internet calls, thereby harming innovation and price competition.

The Nokia E61/E62 is only one example of a wireless carrier exercising control over the equipment market to disable handset features. Unfortunately,

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<sup>24</sup> Gary Krakow, *The Nokia E62: The Best Smartphone Ever?* (Aug. 24, 2006), available at <http://www.msnbc.msn.com/id/14456766/>.

all carriers appear to engage in such restrictive practices to varying degrees. For example, Verizon typically disables Bluetooth data transfer functionality in handsets so as to require customers to use the carrier's paid services instead of utilizing Bluetooth to accomplish the same goals.<sup>25</sup> A disclaimer on Nokia's website sums up the state of the market for wireless handsets:

Some networks have limitations that affect how you can use phone features. Your service provider also may have requested that certain features not be activated in a phone. If so, they may not appear in the phone's menu. Contact your service provider about feature support and availability.<sup>26</sup>

This disclaimer is merely one expression of the barriers that innovative equipment manufacturers have in satisfying consumer demands.<sup>27</sup>

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<sup>25</sup> Charles Babington, *A Call To Let Your Phone Loose – Telecom's New Battleground: Carriers' Proprietary Controls*, Wash. Post, Feb. 9, 2007, at D1, D3; Shelley Solheim, *Verizon Wireless Users Sue Over Disabled Bluetooth Features* (Jan. 14, 2005), available at <http://www.eweek.com/article2/0,1759,1751567,00.asp>. See also David Berlind, *Buyer Beware: Verizon Wireless and [Sprint Nextel] Disabling Features on Handsets They Sell*, ZDNet Blog Between The Lines (Aug. 2, 2006), available at <http://blogs.zdnet.com/BTL/?p=3415> (describing how some carriers disable a Motorola handset software feature that permits pictures to be transferred from the handset to a PC, and noting that "phone manufacturers are putting cool technologies into their phones (technologies that might cause you to buy them) only to have wireless carriers disable those technologies.").

<sup>26</sup> <http://www.nokiausa.com/phones/comparephones> (last visited Feb. 8, 2007).

<sup>27</sup> See Phil Carson, *Rattling the Cage: Handset Vendors Aim to Satisfy Carriers, But Also Explore Alternative Channels*, RCR Wireless News (Jan. 15, 2007) ("The single thread that emerged unbidden from conversations with the top-tier handset vendors at CES was – in so many carefully chosen words – the issue of carrier dominance in the U.S. market."); Kevin Maney, *FCC Ruling Changed Phone Industry in 1968; It Could Happen Again Today*, USA Today (Jan. 30, 2007), available at [http://www.usatoday.com/money/industries/technology/maney/2007-01-30-carterfone\\_x.htm](http://www.usatoday.com/money/industries/technology/maney/2007-01-30-carterfone_x.htm) ("Cellphone makers want [handsets and service to be unbundled], though they don't like to say so and risk offending their wireless carrier partners.").

## b. Locking of Handsets to Particular Operators

Another common practice used by wireless carriers is the locking of handsets so that they may not be used on any network.<sup>28</sup> While some carriers permit customers to unlock their phone upon request provided they have been used for a certain amount of time, “most consumers have no idea what a phone lock is” and so are not aware of this option.<sup>29</sup> Locking handsets acts as a barrier for consumers who may wish to switch carriers, or results in additional, unwanted equipment purchases by consumers who are not aware they can use their old handset with a new service. Handset locking is an increasing concern as handsets become more advanced, since consumers who make significant financial investments in their handsets are likely to want to retain their handsets from one service to another.<sup>30</sup>

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<sup>28</sup> To be sure, not all handsets will work on all networks because of technical differences between networks (*e.g.*, CDMA vs. GSM). The principle of *Carterfone* is not blind to such issues of technical feasibility. However, the locking of handsets by carriers goes well beyond the question of technical compatibility by limiting handsets to a particular network even when the handset could otherwise work on the network of a competing carrier.

<sup>29</sup> Babington, *supra* note 22, at D3 (quoting Columbia Law Professor Timothy Wu).

<sup>30</sup> Handset locking is only one way in which wireless carriers prevent or at best discourage consumers from “porting” their handsets to a different service. Other tactics include exclusive deals with equipment manufacturers and early termination fees (ETFs). See Babington, *supra* note 22, at D3 (“Some hold up Apple’s iPhone as another example of the industry’s restrictive practices, because it will operate only on AT&T’s mobile service when it goes on sale this summer.”); Maney, *supra* note 24 (“Millions of customers of Verizon Wireless or Sprint or T-Mobile would probably like to buy an Apple iPhone to replace their current phones, and just plug in a little chip and make it work on their existing calling plans. Can’t happen. The iPhone will work only on AT&T’s Cingular wireless network.”). See also Wall Street Journal, February 17, 2007, p. A1, for a description of the extraordinary effort that Apple made to break the hold of the wireless carriers in order to develop the iPhone (“Apple bucked the rules of the cellphone

It should be noted that the phone locking practices of U.S.-based wireless carriers are at odds with those of wireless carriers in most other countries. For example, in most European and Asian countries, consumers can readily purchase unlocked handsets that they can use with separately-purchased SIM cards. As frequent travelers to Europe may know, this enables European consumers to swap SIM cards as they travel from country to country, giving them a domestic phone number and enabling them to make domestic calls in each country. The same is true in most Asian countries. While regulators in most countries do not prohibit handset locking outright, they typically ensure that locking is done for legitimate purposes only – such as to prohibit theft or fraud and the enforcement of a rental or installment contract, rather than for anti-competitive reasons – and that consumers are made aware of handset locks and how to unlock them.<sup>31</sup>

## 2. Consumer Harm at the Application Layer

The issues presented by this Petition address the interaction between device manufacturers and wireless carriers, but the issue of paramount concern

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industry by wresting control away from the normally powerful wireless carriers. These service providers usually hold enormous sway over how phones are developed and marketed – controlling every detail from processing power to the various features that come with the phone.”).

<sup>31</sup> See, e.g., *The Commission Takes Action to Prevent Anti-Competitive Practices in the Mobile Phones Sector*, Reference IP/96/791, Aug. 08, 1996 (describing European Commission efforts, including warning letters to wireless carriers, to ensure that SIM card locks are not used for anti-competitive purposes); *Way Forward of “SIM Lock,”* Statement by the Telecommunications Authority of Hong Kong, Feb. 20, 1997, available at <http://www.ofta.gov.hk/en/tas/mobile/ta970220-content.html>.

for Skype is establishing a consumer's right to use Internet communications software that does not harm the network. Wireless carriers have inhibited the development of application-layer competition by insisting on a closed or "walled garden" approach toward 3G networks, shutting out device features and applications for reasons that appear unrelated to any "harm to the network." Wireless carriers also restrict consumers' ability to access innovative applications and services that they perceive as competing with their own (or their favored) applications and services.

**a. Terms of Service Limitations**

Today, the major U.S. wireless carriers offer, or will soon offer, some form of 3G Internet access. However, the largest wireless operators include in their terms of service explicit limitations that make it impossible for consumers to use the full features of 3G devices to access and utilize applications and services of their choosing.<sup>32</sup> These terms of service typically prohibit the use of the 3G service for VoIP applications such as Skype. While advertised as "unlimited" services, a closer inspection reveals the real limitations of these services:

Verizon: "Unlimited Data Plans and Features . . . may ONLY be used with wireless devices for the following purposes: (i) Internet browsing; (ii) email; and (iii) intranet access . . . . *The Unlimited Data Plans and Features MAY NOT be used for any other purpose.* Examples of prohibited uses include, without limitation, the following: (i) continuous uploading, downloading or streaming of audio or video programming or games; (ii)

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<sup>32</sup> In the case of Sprint, the Terms of Service withdraw from consumers the right to an ill-defined category of "heavy" or "continuous" services. See *Sprint Terms and Conditions*, available at <http://www.sprintpcs.com/common/popups/popLegalTermsPrivacy.html> (last visited Feb. 12, 2007).

server devices or host computer applications, including, but not limited to, Web camera posts or broadcasts, automatic data feeds, automated machine-to-machine connections or peer-to-peer (P2P) file sharing . . . .”<sup>33</sup>

AT&T/Cingular: “Prohibited uses include, but are not limited to . . . (iii) for Voice over IP.”<sup>34</sup>

As with the practice of disabling handset features and handset locking, the terms of service appear to go well beyond prohibiting activities that might harm the network; instead, they are designed to prevent the use of applications and services for competitive reasons. Such restrictions on the services that a subscriber’s handset can access go beyond a carrier’s reasonable business interests and impinge upon the right of consumers to make full use of the equipment and service they have purchased.

#### **b. Lack of Open Development Platforms**

In stark contrast to open development standards that exist on the Internet, wireless carriers have exerted control over devices as well as the mobile operating systems upon which they run. Many have instituted an elaborate set of application locks that make running unaffiliated applications like Skype difficult if not impossible. In the market for 3G-enabled devices carriers’ qualification and approval — or whitelisting — requirements are opaque and shifting. The lack of clarity around these standards acts as a significant barrier to

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<sup>33</sup> <http://www.verizonwireless.com/b2c/store/controller?item=planFirst&action=viewPlanDetail&catId=409> (last visited Feb. 12, 2007) (emphasis added).

<sup>34</sup> [http://www.cingular.com/b2b/downloads/terms\\_wirelessDataService.pdf](http://www.cingular.com/b2b/downloads/terms_wirelessDataService.pdf) (last visited Feb. 12, 2007).

the nearly unlimited number of application developers writing software for the mobile Internet.

For example, BREW and JAVA development environments require Skype to obtain the permission of the device manufacturers and the particular underlying carrier before our software can pass through various locks installed in these development environments. Of course, Skype recognizes that some level of cooperation is required among carriers, device manufacturers, mobile OS developers, and application developers. However, such cooperation should be based on transparent technical standards designed to (1) protect the integrity of the network, and (2) otherwise enable consumers to run applications like Skype as they have been designed. Transparency and clarity around these two issues will expand the range of innovative services that U.S. wireless consumers can choose from and enable new modes of price competition.<sup>35</sup>

**C. There Have Been Substantial Changes Since the Commission Last Examined the Effect of Carrier Practices on The Mobile Device Market**

It has been almost fifteen years since the Commission examined the influence of wireless carriers on the wireless handset marketplace, when it addressed the distinct issue of whether wireless carriers should be permitted to bundle together handsets and service.

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<sup>35</sup> See Babington, *supra* note 22, at D3 (quoting Art Brodsky of Public Knowledge as saying “[p]eople now don’t understand how limited they are in what they can do with their cellphones.”).



In a 1992 *Report and Order*, the Commission permitted “cellular CPE and cellular service to be offered on a bundled basis, provided that cellular service is also offered separately on a nondiscriminatory basis.”<sup>36</sup> The risks of bundling wireless service with handsets would not have been accepted without the safety valve of the unfettered availability of wireless service only. Many factual and competitive characteristics underlay the Commission’s decision. Since 1992, however, most of those characteristics have changed in a way that calls the Commission’s analysis into question.

There are, moreover, additional aspects of today’s wireless marketplace that have a strong bearing on the Commission’s decision. In particular, the incentives and practices of the wireless carrier described above raise the question of whether carriers are complying with the critical proviso of offering unfettered, nondiscriminatory service to consumers irrespective of their equipment.

One basic change has been in the structure of the wireless marketplace; following consolidation, there are a smaller number of carriers in the market, a market many regard as oligopolistic. For example, the average Herfindahl-Hirschman Index values in the mobile telephony market are 2706, well above 1800 which the FTC and DOJ consider “highly concentrated.”<sup>37</sup>

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<sup>36</sup> *Bundling of Cellular Customer Premises Equipment and Cellular Service*, Report and Order, CC Docket No. 91-34, FCC 92-207, 7 FCC Rcd 4028, 4028 (1992) (“*CPE Bundling Order*”).

<sup>37</sup> *Eleventh CMRS Competition Report* at 21, para. 45 (noting average HHI); U.S. Dept. of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines*, Apr. 8, 1997, at 15, Section 1.5, available at <http://www.usdoj.gov/atr/public/guidelines/hmg.pdf> (noting that markets with HHIs above 1800 are characterized as “highly concentrated”).

In permitting carriers to bundle cellular service and handsets in 1992, the Commission observed a market in which most wireless carriers were smaller and operated in local markets, making it unlikely that they could “possess market power that could impact the numerous CPE manufacturers operating on a national... basis.”<sup>38</sup> This situation has changed dramatically, as the market is now dominated by four, large nationwide carriers with large enough subscriber bases to exert significant influence on handset manufacturers.<sup>39</sup> The simple truth is that manufacturers depend upon carriers to market their devices, and no manufacturer can afford not to “play ball” with the largest wireless carriers.

Furthermore, the Commission’s analysis in 1992 focused almost exclusively on the pricing of handsets within a market limited to voice services. However, as discussed above, many new 3G handsets do much more than mobile voice communications, and many support running Skype. Accordingly, the issue today is not simply whether wireless carriers can control the market for basic wireless voice telephony, but whether they can control the adjacent markets for applications and services that use the carriers’ 3G platform. In such a market, the Commission should be concerned not only with anticompetitive effects *vis-à-vis* other wireless carriers but also with the effect on device innovation and the possibility that entities will frustrate new sources of price competition to

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<sup>38</sup> *CPE Bundling Order* at 4029-30.

<sup>39</sup> AT&T/Cingular, Verizon, and Sprint Nextel are clearly the three largest carriers, and each possess enough market share – approximately 25 percent each – to exert effective control over equipment manufacturer practices. See *Eleventh CMRS Competition Report* at 102 (Table 4).

traditional voice services. Thus, when a carrier requests that a manufacturer disable a handset's Wi-Fi functionality, this act may have little competitive impact on other wireless carriers, but it will adversely impact consumers who could benefit from new forms of price competition from applications such as Skype.

Similar concerns arise when carriers disable features such as Bluetooth functionality, as carriers once again are favoring their own "additional" services – music and video downloads, photograph and other file transfer, etc. – over those offered by unaffiliated third-parties. In each instance, consumers are worse off as competition – broadly defined as competition for services the consumer desires irrespective of the particular technology used – is diminished.

In light of these and similar practices, the Commission has sufficient cause to examine whether carriers are true to the nondiscriminatory unbundled service condition that permitted them to bundle handsets and service in the first place.<sup>40</sup> By locking handsets, entering into exclusive distribution agreements, and imposing early termination fees, wireless carriers are discouraging – and in some instances obstructing – consumers from accessing the carrier's service with their own fully-functioning, fully-capable handsets.

In any such examination, the Commission should consider whether there is sufficient competitive discipline in the marketplace to avoid the need for a regulatory corrective. In so doing, there is an understandable impulse for

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<sup>40</sup> *CPE Bundling Order* at 4030, 4032.

regulators to rely on markets to self-correct and solve problems in advance of government solutions, which may be perceived as intrusive and clumsy.

However, even with the presence of a number of facilities-based wireless competitors, there is cause for concern. While competition among wireless carriers may be sufficient to act as a check on the pricing of services, the four large national wireless carriers have the same incentive to avoid commoditizing their voice service; and thus the same need to control subscribers' handsets and the applications and software that run on them.

For example, with respect to the restrictive practices described above, no single carrier is likely to change its ways on its own because doing so would only make it easier for its customers to use competitive services. In this respect, the marketplace inertia that is keeping carriers from adopting better practices – *e.g.*, unlocking consumer handsets and making them “portable” – is closely analogous to the inertia that the Commission recognized when it required wireless local number portability (“LNP”). As the Commission explained when it rejected a petition for permanent forbearance from the wireless LNP rules:

[W]e are not convinced that market forces would ensure implementation of LNP. Although certain carriers may want all wireless carriers to implement LNP because they believe it will result in a net gain of subscribers, other carriers may feel differently and will not have any incentive to implement LNP because they may be convinced that industry-wide LNP will only serve to make it easier for their subscribers to leave them. Consequently, it is unlikely for the entire industry to agree to move to wireless LNP voluntarily. In addition, there may be economic disincentives for any individual carrier to be the first to voluntarily adopt full LNP, which would provide its subscribers the flexibility to switch to a

different carrier while retaining their current phone numbers. This is because, absent the implementation of full LNP by other wireless carriers, that carrier could not gain any new wireless customers from the non-participating wireless carriers.<sup>41</sup>

This analysis applies just as well to the issues presented by this Petition.

Skype would be in a position to know whether any 3G wireless carrier has adopted a “maverick” approach to this market, but regrettably, none has emerged. Skype understands that there is a natural impulse on behalf of regulators to assume that the anti-consumer practices of wireless providers will naturally self-correct through such “maverick” behavior. The fact that no “maverick” has emerged may say more about the business models of the leading four wireless carriers and their reliance upon selling minutes or buckets of minutes than any technological impediment to enhanced innovation and price competition from software-defined services.

### **III. THE COMMISSION SHOULD DECLARE THAT WIRELESS CARRIER SERVICES ARE FULLY SUBJECT TO *CARTERFONE***

In light of the changes in the wireless market and the restrictive carrier practices described above, the Commission should make clear that subscribers have the right to attach non-harmful devices to their wireless networks and run applications of their choosing. Such a consumer right flows directly from both the Commission’s *Carterfone* decision and the 1992 *CPE Bundling Order*’s

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<sup>41</sup> *Verizon Wireless’s Petition for Partial Forbearance from the Commercial Mobile Radio Services Number Portability Obligation*, WT Docket No. 01-184, FCC 02-215, para. 21 (rel. July 26, 2002).

requirement that “that cellular service is also offered separately [from bundled equipment] on a nondiscriminatory basis.”<sup>42</sup>

The Commission should issue a declaratory ruling stating that the *Carterfone* right to attach fully-capable, non-harmful devices applies to all services offered by wireless carriers. The principle of *Carterfone* derives from Sections 201 and 202 of the Communications Act, as preventing consumers from attaching devices of their choosing was found to be unjust and unreasonable under Section 201(b) of the Act and unduly discriminatory under Section 202(a) of the Act.<sup>43</sup> While the Commission has forborne from applying several sections of Title II to wireless carriers, it has made clear that such carriers remain subject to Sections 201 and 202.<sup>44</sup> The Commission has also made clear that the “bedrock consumer protection obligations”<sup>45</sup> of Sections 201 and 202 apply “even when competition exists in a market.”<sup>46</sup> Moreover, with respect to the *Carterfone* principle, the Commission has acknowledged wireless consumers’ existing *Carterfone* right to attach CPE of their choice when it noted that “current

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<sup>42</sup> *CPE Bundling Order* at 4029.

<sup>43</sup> *Carterfone*, 13 FCC 2d at 423.

<sup>44</sup> *Personal Communications Industry Association’s Broadband Personal Communications Services Alliance’s Petition for Forbearance For Broadband Personal Communications Services; Forbearance from Applying Provisions of the Communications Act to Wireless Telecommunications Carriers*, Memorandum Opinion and Order and Notice of Proposed Rulemaking, WT Docket No. 98-100, FCC 98-134, 13 FCC Rcd 16,857, 16,865-66, paras. 15-18 (rel. July 2, 1998) (noting that Sections 201 and 202 codify “the bedrock consumer protection obligations” and that their existence “gives the Commission the power to protect consumers by defining forbidden practices and enforcing compliance.”) (“*PCIA Forbearance Order*”).

<sup>45</sup> *Id.* at 16,865, para. 15.

<sup>46</sup> *Id.* at 16,866, para. 17.

nondiscrimination requirements preclude a cellular carrier from refusing to provide service to a customer on the basis of what CPE the customer owns.”<sup>47</sup>

Furthermore, to the extent that some services offered by wireless carriers, now or with respect to a future regulatory classification, do not fall under Title II,<sup>48</sup> the Commission should declare that consumers have the right to attach non-harmful devices to wireless networks, regardless of whether such networks provide services classified under Title I or Title II. Such a declaration can be made either as an exercise of the Commission’s ancillary jurisdiction or directly through Title II. Wireless handsets that are subject to a *Carterfone*-based right to attach typically are used to access both voice services (regulated under Title II) and non-voice services such as 3G/broadband Internet access (which may be classified as under either Title I or Title II). Indeed, as stated above, the Commission has found that *Carterfone*’s basic nondiscrimination principle – as to both “attachments” and applications – applies to wireline broadband services regulated under Title I.<sup>49</sup>

Thus, wireline broadband services – where service providers exercise virtually no control over the equipment used by consumers to access the network

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<sup>47</sup> *CPE Bundling Order* at 4030.

<sup>48</sup> Statement of Hon. Kevin J. Martin Before the Committee On Commerce, Science & Transportation, U.S. Senate, Feb. 1, 2007, at 7 (“The Commission is also considering an order that would classify wireless broadband Internet access as an information service.”).

<sup>49</sup> *Broadband Policy Statement*, FCC 05-151, at 3. The Commission has also made clear that, even though such services were regulated under Title I, it has the “jurisdiction necessary to ensure that providers of telecommunications for Internet access or [IP-enabled] services are operated in a neutral manner.” *Id.*

– are subject to consumers' entitlement to "connect their choice of legal devices that do not harm the network."<sup>50</sup> Wireless broadband services regulated under Title I also should be subject to this same right to "attach" and right to run applications and use services of their choice. This is particularly the case since, as discussed above, wireless carriers exert far more control over the development of equipment used to access their services than do wireline providers exert over their broadband networks. Over time, consumers will roam seamlessly between 3G, Wi-Fi and traditional wired phone networks. It makes little sense for a consumer to surrender her right to attach any non-harmful device as soon as she leaves her home, even though a voice session could technically interoperate between all three networks.

#### **IV. THE COMMISSION SHOULD INITIATE A RULEMAKING PROCEEDING TO ENFORCE THE MANDATE OF *CARTERPHONE* IN THE WIRELESS INDUSTRY.**

Once the Commission issues the declaratory ruling requested above, it should enforce the mandate of *Carterfone* by initiating a rulemaking proceeding to determine whether the wireless carriers restrictive practices outlined in this Petition comport with the carriers' obligations under the *Carterfone* principle and the open network proviso of the 1992 *Bundled CPE Order*. As discussed in Section II. C. of this Petition, it has been almost 15 years since the *Bundled CPE Order* was adopted. It is now time for the Commission to reexamine the effect of wireless

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<sup>50</sup> *Id.* at 3 (citing *Hush-a-Phone* and *Carterfone*).



carrier practices on the full availability and application/software functionality of wireless CPE.

The structure of the wireless personal communications industry has changed dramatically since 1992, with four national carriers dominating a national market and able to exert significant influence on handset manufacturers. Restrictive carrier practices call into question whether wireless carriers are complying with the critical proviso that they provide unfettered, nondiscriminatory service to consumers irrespective of their equipment and what applications and software are running on that equipment. A consumer's right to attach a non-harmful device of his choosing to the network means little if the only devices that are available to consumers have applications and software controlled by the network operator.

The Commission should initiate a rulemaking proceeding in which it examines carrier practices with respect to the wireless handset industry and software marketplace. In addition to reexamining the structure of the market and such relationships, the Commission should examine whether carrier practices such as device whitelisting, feature crippling, handset locking, exclusive equipment deals, terms of service limitations, and the lack of open platforms are consistent with the "bedrock consumer protection obligations" of Sections 201 and 202 of the Act and expressed in *Carterfone*.

It is important to emphasize that nothing about the relief requested in this Petition would entangle the FCC in policing intricate or difficult to identify anti-consumer behavior. Instead, through enforcement of a straightforward attachment principle, the Commission will have succeeded in unlocking a vast new source of price competition and innovation for wireless users.

**V. THE RULEMAKING PROCEEDING ALSO SHOULD CREATE A MECHANISM TO PROTECT CONSUMERS' RIGHTS TO USE THE INTERNET COMMUNICATIONS SOFTWARE OF THEIR CHOICE**

Following its *Carterfone* decision, the Commission established a set of technical standards, codified in Part 68, which enabled users to connect any device that complied with a basic set of rules. Concurrent with the notice of inquiry described above, the Commission should create a mechanism to establish similar technical standards updated to take into account the unique environment of the mobile Internet. The goal should be to create transparent and neutral standards under which consumers can exercise their right to run the Internet communications applications of their choice.<sup>51</sup>

Skype recognizes the critical need for broad industry involvement and cooperation in this effort. Skype approaches these issues with humility, recognizing that application-layer competition depends in part upon the 3G deployment efforts of wireless carriers. However, it is equally true that maximizing consumer benefits also depends upon innovation by third-party

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<sup>51</sup> In this regard, the Commission may wish to pattern its procedures upon those found in Section 68.201 of the Commission's rules.

application developers, as well as some level of oversight over carrier implementation of technical standards. The Commission can provide an essential mechanism that will facilitate the goal of device connectivity.

In this regard, the Commission should establish a mechanism to create technical standards that protect the *Carterfone* principle with respect to the market for applications that run on 3G Internet access networks. The technical standards should: 1) enhance consumer choice; 2) increase price competition from software-defined services; 3) forward innovation; and 4) preserve network integrity. Skype suggests that this mechanism should include an industry-led forum having the following clearly-defined elements:

- All interested parties – carriers, device manufacturers, mobile OS developers, consumer groups and application developers – should be allowed to participate.
- Representatives from the FCC's Office of Engineering and Technology should oversee these industry efforts.
- The forum should be empowered to solicit the advice of academics and other experts to support the FAC's work.
- The forum should complete its work by a specified date and issue interim reports as necessary.
- The Commission should express its intention to implement the group's findings.

The goal of this forum would be to protect the *Carterfone* principle as applied to 3G Internet access networks so that: “no entity can enforce techniques such as blocking, locking, or certification requirements that have the intention of preventing consumers from modifying or installing software unless it is

reasonably proven that such software harms the network.” Clarity around this issue will ensure that carrier’s network management techniques are respected but will never become a pretext for activity that is anti-consumer or anticompetitive.

In the end, updating this Commission’s *Carterfone* principle for an era of software-defined services would unlock tremendous new forms of price competition and innovation for consumers. We therefore respectfully request that the Commission grant the Petition to the extent described herein.

Respectfully submitted,

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*Of Counsel to Skype Communications, S.A.R.L.*

Dated: February 20, 2007

Authority	Implementation	Description *
<b>Alaska</b>	Business, Shared Residential, Hotel/Motel MLTS	Municipalities may require MLTS to comply with E911 generally accepted industry standards as defined by the Regulatory Commission of Alaska
<b>Arkansas</b>	Broad Interpretation	Any exchange telephone service provider is required to send telephone number and street address to the PSAP, rules apply to broad base of entities.
<b>Colorado</b>	MLTS Operators	MLTS operators that do not give the ANI, ALI or both shall disclose this in writing to their end-users and instruct them to provide their phone number and exact location when calling 911.
<b>Connecticut</b>	Business	Companies cannot prevent a 911 call from being made. But, all can be directed to on-site security answering points proven to be the same or better than PSAP. [NEW LEGISLATION PENDING]
<b>Florida</b>	Business	Any PBX installed after 1/1/2004 must be capable of providing ALI, automatic location identification, to the station level.
<b>Illinois</b>	Private Residential and Business Switch Service	Requirements vary based on residential vs. business and square footage. Generally, a distinct location needs to be provided per 40,000 ft <sup>2</sup> or each entity sharing a building.
<b>Kentucky</b>	Residential MLTS Only	MLTS operator must provide updated number and location identification for each phone dialing 911.
<b>Louisiana</b>	Business	Any PBX installed after 1/1/2005 must be capable of providing ALI, automatic location identification, to the station level.
<b>Maine</b>	Business and Residential MLTS	Effective for businesses – MLTS installed or upgraded after 7/27/05 require a minimum of one ANI/ALI per floor, per 40,000 ft <sup>2</sup> . Effective for residences – Minimum of one ANI/ALI per living unit.
<b>Massachusetts</b>	Broad Interpretation	All new or substantially renovated MLTS must route emergency calls to the appropriate PSAP and provide an ANI and ALI for every 911 call.
<b>Michigan</b>	Business	[PENDING] Proposes that providers of private switch equipment or services for businesses be required to ensure their system provides ANI and ALI for all 911 calls.
<b>Minnesota</b>	Business and Residential MLTS	Any owner/operator of a MLTS installed after 1/1/2005 must provide a call back number and emergency response location.
<b>Mississippi</b>	Service Suppliers and Shared Tenant Services	Service supplier must provide access to PSAP. Where technically available, service supplier must provide location and telephone number for each extension.
<b>Nebraska</b>	Unknown	[PROPOSED] Statewide E911 services proposed but MLTS specific requirements not defined.

<b>Ohio</b>	Broad Interpretation	NENA model legislation has been proposed but not passed.
<b>Pennsylvania</b>	MLTS Operators	[PENDING] Proposes that MLTS operators ensure their system provides ALI and ANI. Location information to specify floor, room, building, and/or office or cubicle.
<b>Tennessee</b>	Shared Tenant Service Providers	[PENDING] STSPs required to provide ANI and up-to-date ALI for each 911 call.
<b>Texas</b>	Tarrant County – Business, Multi-tenant services	Businesses utilizing a private or public phone switch to consolidate telephone service must provide a phone number and an accurate physical address of the caller. State of TX requires E911 for residential MLTS.
<b>Vermont</b>	All Businesses	Businesses that own private telephone systems must provide ANI signaling, station identification and updates to the 911 database.
<b>Virginia</b>	Business and Residential MLTS	All PBX/MLTS installed after July 1, 2009 must provide ANI and ALI to the local PSAP for 911 calls unless alternate methods of notification have been approved.
<b>Washington</b>	Business and Residential MLTS	Businesses occupying over 25,000 ft <sup>2</sup> , more than one floor or multiple buildings need to provide automatic location identification in a format compatible with local 911 systems.

Service Features Checklist

Features		Feature Included in Service	Self-Hosted & Provided	Self-Provided & Partner Hosts	Partner Provides & Self-Host (Partner Branding)	Partner Provides & Self-Host (Self-Branding)	Other	Notes
Voice	1 PC-to-PC VoIP	<b>PC-to-PC 2-party VoIP sessions</b>						
		Makes VoIP calls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Receives VoIP calls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<b>Peer-to-peer architecture</b>						
		Session setup & communications travel between users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Only session setup takes place on internal servers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<b>Extent of interoperability with other VoIP systems</b>						
		No interop - communications only within the enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Communication with other customers of internal service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Communication with non-internal VoIP services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2 VoIP-to-PSTN calls	<b>PSTN calling</b>						
		Makes PSTN calls						
		To domestic phone numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		To international phone numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		To emergency phone numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Control over numbers called						
		-User can enter a phone number to call	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		-User selects number from user's contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		-User selects number from list determined by us	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		-Click-to-call (ie, calls to a pre-determined number with no user choice)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Receives PSTN calls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<b>Phone number provided</b>						
		Provided by us	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Provided by a third party	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Geographic number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Non-geographic or toll-free number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Used externally by customer as a contact no.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Used only internally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	3 Messaging / Forwarding / Interactive Voice Response	<b>Voicemail / Call answering</b>						
		Records voicemail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Places voicemail into email		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Telephone access (note below if phone number provided)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Permits calling back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Sends notification of voicemail received (eg, SMS)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Forwarding or redirection</b>								
To another phone number		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
To another device or destination (eg, PC via VoIP, SMS)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Text-to-Voice Conversion</b>								
<b>Interactive Voice Response</b>								
Access to content databases & ordering systems		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Transfer calls to call center		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Remote Call Control / PBX integration</b>								
Control legacy/IP phone from soft client		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Dual forking (ring several end-points on incoming call)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Mobile companion (dual forking with mobile phone)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>Integrated with other non-communications service</b>								
(eg, games, web presentation) - please describe below	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Please describe any other voice-related features that do not fit in the tick boxes above. Please also identify which features are offered/provisioned internally and which features are the responsibility of, or delivered by, a third

Features		Self-Hosted & Provided	Self-Provided & Partner Hosts	Partner Provides & Self-Host (Partner Branding)	Partner Provides & Self-Host (Self-Branding)	Other	Notes
party:							



Features	<u>Feature Included in Service</u>	Self-Hosted & Provided	Self-Provided & Partner Hosts	Partner Provides & Self-Host (Partner Branding)	Partner Provides & Self-Host (Self-Branding)	Other	Notes
<b>Video</b>  <b>Realtime video included</b> (note audio features above) PC-to-PC 2-party video  <b>Peer-to-peer architecture</b> Session setup & communications travel between users Only session setup takes place on internal servers  <b>Integrated with other non-communications service</b> (eg, games, web presentation) - please describe below	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	
Please describe any other video-related features that do not fit in the tick boxes above. Please also identify which features are offered/provisioned internally and which features are the responsibility of, or delivered by, a third party:							

Features			Feature Included in Service	Self-Hosted & Provided	Self-Provided & Partner Hosts	Partner Provides & Self-Host (Partner Branding)	Partner Provides & Self-Host (Self-Branding)	Other	Notes
<b>Conferencing</b>									
<b>1 Content sharing</b>									
<b>Desktop sharing</b>									
Application/desktop sharing with multiple users			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Advanced features</b>									
Recording / archiving of web conference			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>2 PC-to-PC audio/video sharing</b>									
<b>Audio sharing</b>									
Listen-only audio conferencing (no PSTN connection)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Full audio conferencing/online chat (no PSTN connection connection)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Video conferencing</b>									
Multiparty video conferencing			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3 PSTN connectivity</b>									
Mixing of VoIP and PSTN calls (no PSTN termination)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dial-in PSTN access to audio conference			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dial-out PSTN access to audio conference			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Please describe any other conferencing-related features that do not fit in the tick boxes above. Please also identify which features are offered/provisioned internally and which features are the responsibility of, or delivered by, a third party:									

## ACC Extras

Supplemental resources available on [www.acc.com](http://www.acc.com)

Strategic Implementation of Law Department Technologies (Participants' Briefing Book).

Program Material. February 2008

<http://www.acc.com/legalresources/resource.cfm?show=19843>

Law Department Technology Deployment Self-Assessment Survey. Toolkit Resource. September 2008

<http://www.acc.com/legalresources/resource.cfm?show=39351>

Technology Systems Contracting Checklist.

Quick Reference. January 2007

<http://www.acc.com/legalresources/resource.cfm?show=16570>

Please note, these additional resources are provided by the Association of Corporate Counsel and not by the faculty of this session.