

## **Introduction**

This note is intended to provide informal guidance for companies who are using Voice over Internet Protocol (VoIP) technology to deliver communications services to customers.

The guidance has been set out in the form of questions and answers addressing the issues most commonly raised with Oftel. This note is intended to be helpful but should not be assumed to be providing you with legal advice on how any of the matters raised in this note affects (and applies to) your particular organisation and service. Please seek independent legal advice if you do need such advice.

The Director will not fetter his discretion in advance of any decision he might take. Therefore the Director retains his ability to depart from any guidance offered in this note as circumstances may dictate.

This guidance replaces the “Frequently asked questions on the regulation of Voice over Internet Protocol services” published in April 2002.

## **Background**

### **Changes to the regulatory regime**

On 25 July 2003 the UK implemented a new regulatory framework for the regulation of electronic communications. In addition, parts of the Telecommunications Act 1984 were repealed.

The new regulatory framework is based on new EC Communications Directives that are intended to converge and harmonise communication regulation throughout the EC. This package of Directives introduced a new framework and regulatory regime that saw the ending of the licensing regime and the move to general authorisation. The five new Directives are:

1. Directive 2002/19/EC - on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive);
2. Directive 2002/20/EC - on the authorisation of electronic communications networks and services (the Authorisation Directive);
3. Directive 2002/21/EC - on a common regulatory framework for electronic communications networks and services (the Framework Directive);
4. Directive 2002/22/EC - on universal service and users' rights relating to electronic communications networks and services (the Universal Service Directive); and
5. Directive 2002/58/EC - concerning the processing of personal data and the protection of privacy in the electronic communications sector (the Privacy Directive).

The Telecommunications Act 1984 has now been replaced as the primary legislation for the regulation of communication providers by the Communications Act 2003 (the Act). The first four of the five Directives above were implemented by the Communications Act 2003. The fifth is being implemented separately in the autumn of 2003 by Statutory Instrument (SI No.2426 of 2003).

The new regime aims to be “technology neutral” and is applied to all electronic communication services and networks. Under the new regime communications providers can provide services and networks without first having to seek permission or authorisation. Instead of a set of licences with varying obligations, all communications providers now have to abide by the General Conditions of Entitlement and any specific conditions that individually apply to them.

The General Conditions are a set of 21 conditions outlining the minimum obligations of communications providers. As providers do not now receive a licence that sets out their individual conditions of operation, it is recommended that the General Conditions should be read carefully so that communications providers may determine which of the conditions apply to them.

You should note that each of the General Conditions contains a definition of the type of communications provider to which that General Condition applies.

The General Conditions can be found at  
[http://www.oftel.gov.uk/publications/eu\\_directives/2003/cond\\_final0703.pdf](http://www.oftel.gov.uk/publications/eu_directives/2003/cond_final0703.pdf)

For further information on the background to the new regime refer to the Of tel website at  
[http://www.oftel.gov.uk/ind\\_info/eu\\_directives/index.htm](http://www.oftel.gov.uk/ind_info/eu_directives/index.htm)

A guide to the new regulatory framework for service providers can be found at:  
[http://www.oftel.gov.uk/publications/eu\\_directives/2002/sepr1202.htm](http://www.oftel.gov.uk/publications/eu_directives/2002/sepr1202.htm)

The Statutory Instrument implementing the Privacy Directive can be found at  
[http://www.legislation.hmso.gov.uk/cgi-bin2/hmso\\_hl?DB=hmso-new&STEMMER=en&WORDS=ec+directive+privaci+&COLOUR=Red&STYLE=s&URL=http://www.hmso.gov.uk/si/si2003/20032426.htm#muscat\\_highlighter\\_first\\_match](http://www.legislation.hmso.gov.uk/cgi-bin2/hmso_hl?DB=hmso-new&STEMMER=en&WORDS=ec+directive+privaci+&COLOUR=Red&STYLE=s&URL=http://www.hmso.gov.uk/si/si2003/20032426.htm#muscat_highlighter_first_match)

### **The Office of Communications (Ofcom)**

At present, the following five organisations are involved in the regulation of electronic communications:

- Radiocommunications Agency,
- Of tel,

- Independent Television Commission,
- Radio Authority, and
- Broadcasting Standards Commission

On 29 December 2003 these organisations will merge to form one regulatory body for communications, Ofcom. Any advice and information set out in this note may be revised and amended when Ofcom assumes its role as the communications regulator.

Until 29 December 2003, the Director General of Telecommunications ('the Director') will exercise relevant functions and duties in respect of communications networks and services under the Communications Act 2003.

More information about Ofcom can be found on the Ofcom website at <http://www.ofcom.org.uk/>

### **Other technologies**

Oftel has a technology-neutral approach to regulation. This means that Oftel neither imposes, nor discriminates in favour of, the use of a particular type of technology except where necessary. Consequently, although this note focuses on the use of voice over IP technology, this guidance may also be relevant to other related technologies, for example voice over ATM.

# Frequently Asked Questions

## 1 What does Oftel consider to be VoIP?

1.1 Terminology in this area is often used inconsistently. To avoid confusion, Oftel has set out its understanding of commonly used terms below.

1.2 “Voice over Internet Protocol” (VoIP) is the generic name for the transport of voice traffic using Internet Protocol (IP) technology. The VoIP traffic can be carried on a private managed network or the public Internet or a combination of both. A wide range of applications and services could use VoIP technology, from traditional telephone services to interactive games.

1.3 “Internet telephony” (also referred to as Voice over the Internet) is a specific type of VoIP service that uses the public Internet to carry the IP traffic.

## 2 Does Oftel regulate VoIP services?

2.1 Yes, because VoIP services are “electronic communication services” for the purposes of the Communications Act 2003 (‘the Act’). The Act regulates, amongst other things, the provision of “electronic communications networks” (ECNs), “electronic communications services” (ECS) and “associated facilities” (AFs).

2.2. Included here are the definitions of ECNs, ECS and AFs taken from section 32 of the Act:

“(1) In this Act “electronic communications network” means—

- (a) a transmission system for the conveyance, by the use of electrical, magnetic or electro-magnetic energy, of signals of any description; and
- (b) such of the following as are used, by the person providing the system and in association with it, for the conveyance of the signals—
  - (i) apparatus comprised in the system;
  - (ii) apparatus used for the switching or routing of the signals; and
  - (iii) software and stored data.

(2) In this Act “electronic communications service” means a service consisting in, or having as its principal feature, the conveyance by means of an electronic communications network of signals, except in so far as it is a content service.”

“(3) In this Act “associated facility” means a facility which-

- (a) is available for use in association with the use of an electronic communications network or electronic communications service (whether or not one provided by the person making the facility available); and
- (b) is so available for the purpose of-

- (i) making the provision of that network or service possible;
- (ii) making possible the provision of other services provided by means of that network or service; or
- (iii) supporting the provision of such other services.

2.3 The new regulatory regime is a technology-neutral approach to the regulation of communications services and networks and this includes VoIP.

2.4 Therefore, regulation that is relevant to publicly available electronic communications networks and services and interconnection is likely to be relevant irrespective of the technology, for example circuit switched networks or IP networks, used to deliver those services.

2.5 The General Conditions contain many specific requirements on providers of Publicly Available Telephone Services (PATS), however, not all VoIP services are considered to be PATS. For example, many Internet telephony services are not used by customers as a substitute for their existing telephone service (see also question10).

### **3 How does the change in the way Ofcom regulates communications providers affect VoIP services?**

3.1 Although the legal framework under which ECNs and ECS' are provided has changed, most of the regulatory principles and obligations on communications providers are similar.

3.2 Before the implementation of the present regime companies providing telecommunications services had to make sure they were doing so under the appropriate telecommunications licence (known as the licensing regime). This was a requirement of the Telecommunications Act 1984.

3.3 The introduction to the new regime (the general authorisation regime) has meant that all classes of telecommunications licences were revoked on 25 July. The different types of licences (and their varying obligations) have been replaced with the General Conditions of Entitlement and other specific conditions which are imposed on individual communications providers (for example, if they are found to be dominant in a particular market).

3.4 The General Conditions are one set of legal obligations that apply to all communications providers. Companies are expected to read the General Conditions and identify those conditions that apply to their networks and services. You can find further information on the general authorisation regime and the general conditions at [http://www.ofcom.gov.uk/ind\\_info/licensing/index.htm](http://www.ofcom.gov.uk/ind_info/licensing/index.htm)

3.5 The important point about the general authorisation regime is that it allows companies to supply electronic communications networks and services to end users without first having to notify or seek the permission of the regulator.

#### **4 Is the commercial provision of VoIP services permitted in the UK?**

4.1 Yes, the provision of electronic communication networks and services including VoIP and other technologies is permitted (see question 3). The regulatory framework aims to be technology neutral and does not distinguish between the different technologies that communications providers use to deliver their services.

4.2 This does not mean that the commercial provision of VoIP services is entirely unregulated. Communications providers will be expected to make themselves familiar with the General Conditions of Entitlement and to decide which of the conditions will apply to their services (see question 3 above).

#### **5 Does a company wishing to provide VoIP services have to apply to Ofcom before being able to do so?**

5.1 No, the Act establishes the new general authorisation regime, which is a framework under which prior authorisation or permission is not required from Ofcom (or Ofcom) before companies are able to provide electronic networks and services.

#### **6 Is VoIP interconnection between operators permitted?**

6.1 Yes, VoIP interconnection between operators is permitted. Companies providing a “public electronic communication network” must comply with General Condition 1: ‘General Access and Interconnection Obligations’.

6.2 General Condition 1.1 contains the obligation to negotiate interconnection when requested to do so by any other public electronic communications network provider in any part of the European Community.

#### **7 Does Ofcom set the technical standards for VoIP services and interconnection?**

7.1 General Condition 2 (Standardisation and Specified Interfaces) sets out the requirements for communications provider to comply with and/or take account of relevant European and international technical standards where these exist.

7.2 Ofcom has powers to impose technical interface standards to ensure end to end connectivity and interoperability, but has always preferred a co regulatory approach with the industry.

7.3 Oftel promotes the Network Interoperability Consultative Committee (NICC) to be not only a technical advisory committee to the Director, but to produce consensus standards and specifications for interconnection and related interoperability issues.

7.4 If VoIP based services and interconnection give rise to new requirements where a shared standard or specification would assist in the promotion of interoperability, then this should be raised with the NICC.

## **8 Is a company wishing to provide VoIP services able to Oftel apply for number allocations?**

8.1 Communications providers may be eligible to apply for public numbering, in accordance with the requirements set out in General Condition 17 (Allocation, Adoption and Use of telephone numbers) for VoIP based services. However, at present Oftel is examining what is the most appropriate number range for such services.

8.2 Oftel published a consultation document 'Corporate Numbering: a new option for businesses, consultation' on 28 March 2003. That consultation set out a number of proposals for the use of the 05 number range including businesses and VoIP services. Oftel is considering the responses to the consultation and when it has published its statement on the 05 numbering range, this document will be revised to reflect agreed numbering allocations policy for VoIP services.

## **9 Does Oftel impose quality of service requirements on VoIP services and interconnection?**

9.1 Oftel recognises that there may be a demand for cheaper services that may be of a lower quality and therefore does not impose quality of service requirements. However, under General Condition 21 (Quality of Service), the Director does have the power to require providers of public electronic communication services to publish comparable, adequate and up to date information for end users on the quality of its services. In addition the Director can impose technical interface standards to ensure end to end connectivity and interoperability (see question 7).

9.2 Communications providers should also note that when VoIP services are provided using traditional E.164 telephone numbers, callers may not be aware, in advance, that they are calling a customer connected to a VoIP service. When providing a VoIP service that uses E.164 numbers, communications providers should take account of the quality of service that a caller would normally expect when calling an E.164 telephone number.

## **10 Are VoIP services considered to be Publicly Available Telephone Services (PATS)?**

10.1 Service providers and networks considered to be providers of PATS or to support the provision of PATS are subject to certain obligations under the General Conditions.

10.2 If there is any doubt as to whether a service may fall into the PATS category, companies are advised to contact Ofcom for further guidance and to seek independent legal advice. The provision of PATS requires the supply of 999 access and it is extremely important that communications providers are aware of the possible obligations in this area.

10.3 Ofcom considers that a VoIP service should be regulated as PATS if any of the following apply:

- the service is marketed as a substitute for the traditional public telephone service, or
- the service appears to the customer to be a substitute for the traditional public telephone service over which they would expect to access 999, Directory Enquiries etc without difficulty; or;
- the service provides the customer's sole means of access to the traditional circuit switched public telephone network.

10.4 However, where a VoIP service is clearly being offered as an adjunct to a traditional telephone service or as a secondary service, it is likely not to be considered as PATS. Ofcom would however expect VoIP providers selling secondary services to ensure that the customer and third parties using the VoIP service are fully aware of the nature and limitations of the service.

## **11 What are the regulations which apply to PATS?**

11.1 As mentioned elsewhere in this note, communications providers must make themselves familiar with the General Conditions of Entitlement. Below is a short but not exhaustive list of the conditions to which providers who believe they may be providing publicly available telephone services should refer:

- General Condition 3: Proper and Effective Functioning of the Network (see also question 12)
- General Condition 4: Emergency Call Numbers
- General Condition 8: Operator Assistance, Directories and Directory Enquiry Facilities
- General Condition 15: Special Measures for End Users with Disabilities

## 12 Do the 'lifeline' requirements apply to VoIP services?

12.1 It is of primary concern to Oftel that operators providing VoIP services **do not** automatically assume that the life line requirements will not apply to them. Oftel regards lifeline requirements as the obligations to provide access to the emergency services, operator assistance and Directory Enquiries.

12.2 Oftel have published guidance on the 'lifeline' requirements in *Guidelines on the essential requirements for network security and integrity*. The Guidelines were written in the context of the licensing regime, which ended on 24 July 2003, but the requirements are still relevant to communications providers and the obligations under General Conditions 3, 4 and 8. These Guidelines may in due course be revised to reflect the language and requirements of the new Act. Question 10 sets out the criteria against which a VoIP service may be judged as being PATS.

12.4 For the avoidance of doubt companies are encouraged to consult with Oftel if they are uncertain whether or not they are providing PATS. It should be noted, however, that Oftel is unable to provide specific advice as to the legal obligations of any individual organisation, and therefore companies should always seek their own legal advice if they are in doubt as to their rights and duties.

## References

EU Directives on Communications:

[Directive 2002/19/EC](#) - on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive);  
[Directive 2002/20/EC](#) - on the authorisation of electronic communications networks and services (the Authorisation Directive);  
[Directive 2002/21/EC](#) - on a common regulatory framework for electronic communications networks and services (the Framework Directive);  
[Directive 2002/22/EC](#) - on universal service and users' rights relating to electronic communications networks and services (the Universal Service Directive) and;  
[Directive 2002/58/EC](#) - concerning the processing of personal data and the protection of privacy in the electronic communications sector (the Privacy Directive).

Communications Act 2003

<http://www.legislation.hmsso.gov.uk/acts/acts2003/20030021.htm>

The General Conditions of Entitlement

[http://www.oftel.gov.uk/publications/eu\\_directives/2003/cond\\_final0703.pdf](http://www.oftel.gov.uk/publications/eu_directives/2003/cond_final0703.pdf)

Corporate Numbering: a new option for businesses, consultation – 28 March 2003

<http://www.oftel.gov.uk/publications/numbering/2003/05nums0303.htm>

### **Glossary**

**ATM:** Asynchronous Transfer Mode

**IP:** Internet Protocol

**NICC:** Network Interoperability Consultative Committee

**PSTN:** Public Switched Telephone Network

**PATS:** Publicly Available Telephone Services

**QoS:** Quality of Service

**VoIP:** Voice over Internet Protocol

### **Recommended Reading:**

To help communications providers understand the requirements of the new regime; a list of relevant documents and pages from the OfTel website is set out below. The list is not exhaustive but should assist companies in understanding their obligations and rights.

New EC Regulatory Framework for the regulation of electronic communications

[http://www.oftel.gov.uk/ind\\_info/eu\\_directives/index.htm](http://www.oftel.gov.uk/ind_info/eu_directives/index.htm)

EU directive implementation – Publications

[http://www.oftel.gov.uk/publications/eu\\_directives/index.htm](http://www.oftel.gov.uk/publications/eu_directives/index.htm)

Frequently asked questions (FAQs) by service providers about the new regulatory framework – Version 2 – 13 May 2003

[http://www.oftel.gov.uk/publications/eu\\_directives/2003/spfaq0503.htm](http://www.oftel.gov.uk/publications/eu_directives/2003/spfaq0503.htm)

Guidelines for the interconnection of public electronic communications networks – 23 May 2003

[http://www.oftel.gov.uk/publications/eu\\_directives/2003/intercon0503.htm](http://www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm)

The General Authorisation Regime (includes the General Conditions)

[http://www.oftel.gov.uk/ind\\_info/licensing/index.htm](http://www.oftel.gov.uk/ind_info/licensing/index.htm)

Administrative Charging

[http://www.oftel.gov.uk/ind\\_info/licensing/admin\\_charging.htm](http://www.oftel.gov.uk/ind_info/licensing/admin_charging.htm)

Statement and Direction – Application Forms for Telephone Numbers - 24 July 2003

<http://www.oftel.gov.uk/publications/numbering/2003/forms0703.htm>

Guidelines on the essential requirements for network security and integrity

[http://www.oftel.gov.uk/publications/ind\\_guidelines/guid1002.htm](http://www.oftel.gov.uk/publications/ind_guidelines/guid1002.htm)