# EUROPEAN REGULATORS GROUP CONSULTATION ON A COMMON POSITION ON VOICE OVER INTERNET PROTOCOL (VOIP)

## SUBMISSION BY THE COMMUNICATION WORKERS UNION (CWU)

#### INTRODUCTION

The Communication Workers Union (CWU) has over 70,000 members working in the UK telecommunications sector. Around three quarters are employed in the incumbent operator BT, with the remainder spread over 30 telecommunications companies.

We welcome the ERG consultation on VoIP and forward this submission on the questions raised by the consultation document.

Our basic position is as follows. VoIP services will provide many benefits to consumers in terms of more choice of voice provider and tariff package, cheaper calls, and enhanced services. Therefore there is a need to strike a balance between creating a climate in which the development of such services is not hampered by excessive regulation and between protecting consumers who might otherwise expect VoIP to be, or treat VoIP services as being, equivalent to Publicly Available Telephone Service (PATS) services in areas such as the ability to contact emergency services. Another general point to make is that, while we do not expect that all VoIP providers will meet all PATS standards in the immediate future, we would expect them to make 'best endeavours' to approach such standards and progressively to approach those standards as technology and market conditions develop,

One area we feel is not adequately covered in this consultation is the role of investment which we believe is of critical importance.

New voice services depend on new communications networks. Many companies will be providing such services; many fewer will be investing in such networks. We wish to see a regulatory framework that encourages and incentivises the large-scale investments that are necessary to create Internet Protocol (IP) networks of the kind that BT is building with its 21<sup>st</sup> Century Network (21CN) and other companies, such as the cable and mobile operators, are developing. The regulatory framework must provide clarity and stability to encourage such investments and an adequate return on those investments to ensure fair competition.

The priority for the European Commission is to create for the Member States a world-class communications infrastructure that reaches all homes and businesses and provides both international competitive advantage and enhanced access to a wide range of services including local and national e-government. Then and only then can the objectives for 2010 set out at the Lisbon European Council in 2000, of becoming the most competitive and dynamic knowledge-based economy in the world, be secured.

For competition between network and service providers to be fair and for all citizens to share in the benefits of such new networks and services, we need a policy framework for regulation that makes infrastructure investments both likely and worthwhile.

### Keeping Citizens and Consumers Informed of the Implications of VoIP

Basic voice telephony has been with us for a century. For much of that time, there was a monopoly provider; more latterly with competition, there have been strong regulatory standards exemplified by the European Commission's Publicly Available Telephone Service (PATS) requirements. Therefore citizens and consumers have very clear expectations of their voice services. If these expectations are to be changed in relation to certain new voice services, then this process will need to be carefully and sensitively managed. In some respects, there is a precedent for this: when mobile services were introduced, users had to learn that coverage was not universal and quality of service was inferior to that of PSTN.

In the case of new voice services, there are two particular problems. First, for the initial few years, users of such services will be very much in the minority and the services will probably be used by the more technologically-aware consumer. Second, there will be services which – unlike a mobile service - 'look and feel' like a PSTN service; this will be especially the case where an adapter is used with a conventional telephone or where an IP phone is used.

It is important that consumers know about any problems in relation to connectivity and call quality in relation to new voice services, but it is vital that they know about any limitations in relation to reliability of emergency access since this could be literally an issue of life and death.

IP telephony involves a collision between the traditional IT/ Internet model and the telephony world. Both IT and telephony can be insecure, mainly through viruses or loss of data in IT, and through financial loss in telephony, for example by incurring call charges on unwilling parties. We believe that subscribers of IP services should be informed by their service provider of security risks, and of measures they can take to protect the security of their communications. We believe that the Commission should regulate to ensure that service providers make this information available. The research undertaken by the UK Regulator Ofcom indicated that there was under provision of VoIP services that allowed emergency calls. In a survey of VoIP users conducted for Ofcom in October 2006, 64% of VoIP households surveyed said they had emergency access but it was a service that Ofcom knew would not allow them to call emergency services.

A significant proportion of VoIP consumers were confused about whether they could call the emergency services from their service or not; the October 2006 research found that 78% of UK households with a VoIP service that did not provide emergency access incorrectly thought that it did provide emergency access or did not know if it did.

Some argue that it is not desirable to draw a distinction between services that look like traditional services and those that do not for the purposes of regulation, in large part because such a distinction would be hard to define or enforce and is unlikely to be future proof. The same argument could be made in relation to consumer information.

Even when a visible distinction between services is apparent, we cannot assume – especially in the early stages of this new market – that all consumers of all new services will be clear about what services are and what are not available on their new service.

Therefore we would propose that, at the point of purchase but not at the point of use, all providers of new voice services supply the customer with a clear and simple checklist of services which are provided and those that are not. So that this information is not selective and so that comparisons can readily be made between different competing services, we suggest that the standard checklist is either drawn up by the Commission itself or agreed with ERG and the appropriate organisation(s) representative of actual and potential providers.

We feel that there is a need to take a dynamic view in what will be a fast-changing market. This point could best be captured by the addition of an aim phrased in the following terms: "to encourage providers of new voice services to make best endeavours to achieve PATS-like standards and to move progressively towards PATS-like standards".

#### **Access to Emergency Services**

We believe that access to emergency services is the key regulatory issue and we fully endorse the ERG's conclusion that all telephony service providers should be obliged to provide access to emergency services. In our view, such access should eventually be as reliable as that from current PATS providers.

However, it is our understanding that at the present time the limitations of some IP technology and services make it impossible for some new voice services to offer access to emergency services.

In addition there are VoIP offerings that are not any-to-any communication enabled, such as the plain version of Skype, and within this category no gateway to the PSTN/ISDN or mobile network exists. It is not clear from the ERG's proposals how these services would be mandated to provide access to emergency services.

The ERG's suggested solution of extending the obligation under Article 26.1 of the Universal Service Directive to all telephony service providers that allow access to the PSTN is positive, but also problematic in that it excludes those offerings that do not allow access to the PSTN.

We are not convinced by the ERG's suggestion that the ability to provide access to the emergency services should be removed as a factor in the definition of PATS in the Universal Service Directive, because it would mean VoIP providers would not have to comply with burdensome PATS obligations. Our view is that enforcing PATS obligations on new voice services which offer access to emergency services may not be an unreasonable position. Essentially it depends on the legal interpretation of the level of reliability required of a PATS provider and on a fair assessment of the costs of providing a fully reliable emergency service.

The highly charged and emotional debate that will occur with regard to the absence or a less reliable emergency service has the potential to impact badly on the industry. The fear is that consumers will not be certain as to what are their own circumstances or whether it can change without prior consent. One aspect which requires careful consideration is how vulnerable children may be in the case of reduced or an absence of emergency provision. Children have become aware of emergency services and how to use them through the medium of television drama and through primary school education and have become programmed or accustomed as to what to do in the event of an emergency. This will cause real problems in the future if access to emergency services is not treated as a "public good" and translated as part of a PATS

We believe that whilst new voice services are in the process of development, and until all IP technology platforms and services allow reliable access to emergency services, new voice services that cannot provide the general conditions of PATS should be labelled as 'second line' services, and clearly distinct from 'primary' services. This would prevent the risk of existing primary line services reducing the features they currently offer.

We recognise that it would be impossible to ensure that users actually have access to a primary line. However, we think that if there is a distinction made in the regulation, citizen-

consumers will find it easier to make the decision that they should use a 'primary' service because it will give them the confidence of having reliable access to PATS services. They will also be perfectly aware that if they opt for a second line service as their only line they are at risk of not being able to access basic services like emergency and operator services. Eventually we hope developments in IP technology will enable all telecoms services to offer reliable access to emergency and operator services, and then it will be realistic not to make a distinction in regulation. However, at the present time, the limitations of some IP technology and services make it impossible for some new voice services to offer access to emergency services, and therefore it would be unrealistic to regulate them on the same level as traditional services.

We believe that most providers would, for commercial reasons, wish to provide some sort of emergency service. Some have even indicated that it could be quite a reliable service. Indeed some have suggested that VoIP services could meet the PATS level of reliability. However, there is a danger that through their wish to compete, some providers will be tempted to offer access to emergency services that is very basic and very unreliable. We do not accept that services used and regulated as a primary line service should be allowed to provide less reliable emergency service.

Initially it will probably be the case that the VoIP service will be regarded as a second line service and that the first line will be retained (if for no other reason) for a totally reliable emergency service. However, as familiarity with and confidence in new voice services develop (and perhaps as the reliability of emergency access on such a service improves), consumers may well feel that it is a waste of money to retain the original line simply for the possibility – regarded as remote – that an emergency call will need to be made and therefore abandon the original line and depend totally on the new service.

If this analysis proves correct, it means that the Commission cannot make emergency access on new voice services an option but must insist that it is a requirement (even if the provider cannot initially guarantee the same level of reliability as a PSTN line).

We believe that the availability of emergency service access at current levels of reliability should be the first and dominant concern of the regulator. In the case of services that are used and regulated as a secondary line service, we would argue that it is questionable whether it is in the best interests of consumers to be offered access to emergency services that are potentially unreliable. We believe that it would be better not to allow a provider to give access to emergency services at all if the potential for it to fail is high. On the other hand it would be better to allow a provider to give access to emergency services if its failure potential is low, as long as the user is clearly informed about the reliability of the service.

We believe that the Commission should set a legal requirement for an acceptable level of reliability of access to emergency services before access can be allowed to be provided, and that this legal standard should be set to ensure a high level of reliability. It is also important that this level of reliability should be clearly stated by new voice services to all users and potential users.

## The provision of location information for emergency calls over nomadic services

The CWU agrees that the maximum level of information possible about the caller's location should be provided to the emergency response centre.

We recognise that at the present time there are technical limitations to providing caller location information for nomadic services in an IP environment. However, we believe that solutions to passing on location information from the provider to emergency organisations

are possible, and that they are likely to appear as VoB technology develops. We are encouraged to hear that there are ongoing efforts to achieve a solution to this problem and we agree that the industry should be supported in finding a solution within a reasonable time period. We think that the Commission can help to accelerate the development of such solutions by creating a regulatory framework that encourages investment in this area, by offering nomadic services incentives to provide caller location information.

Although consumers would not generally expect the same level of network integrity from nomadic services, it is nevertheless important that they are made aware of this difference. Promotional and contractual material should make this clear, and consideration should be given to the provision of relevant information as the user logs on to the service from the remote location.

#### **Encouraging investment**

An important issue to resolve is, if PSTN traffic falls (as a result of voice call origination moving to IP), how should the interconnect prices change to reflect the incremental costs of providing interconnect? We would argue that those companies that invest to develop Next Generation Networks (NGN), should be allowed to set their interconnect prices to reflect the cost of that investment and make continued investment worthwhile.

When regulating interconnection and of retail and wholesale prices, the Commission should properly understand and take into account the impact of reduced PSTN, but increased ATM and IP traffic volumes, on the efficient costs of supply for the incumbent operators. We believe that as competition increases, cost-based interconnection and wholesale charges should be allowed to increase to compensate for any reduction in economies of scale experienced by the incumbent.

It is important that the Commission takes into account the impact of VoIP on voice revenues of the incumbents when setting the regulatory framework for network competition, because it is these major network providers that the industry will rely upon to put in the massive investment required for network modernisation.

VoIP service interconnection is an area within which standards are lacking. There is currently no industry consensus of how to achieve a level of service quality sufficiently equivalent to the circuit switched PSTN over an IP network. There is also an array of standards available (e.g. DiffServ, Multi Protocol Label Switching (MPLS) and a variety of opinions concerning how these scale and how best to deploy them. The service providers, network operators, equipment manufacturers, standards organisations, and regulators will need to collaborate to ensure that suitable technical solutions for carrier-scale VoIP to VoIP interconnect exist, on a timescale which matches carrier deployments of VoIP to replace their existing circuit switched PSTN. We believe that ERG should initiate and encourage this collaboration to make the adoption of standards a priority, with the ultimate aim of improving quality of service.

#### CONCLUSION

The CWU welcomes the opportunity to respond to the ERG's consultation on VoIP. We believe that access to emergency services is the key regulatory issue and we fully endorse the ERG's conclusion that all telephony service providers should be obliged to provide access to emergency services. However, we are not convinced that we have reached a stage at the present time where it is practical to introduce such an obligation. Furthermore,

we believe that until all IP technology platforms and services allow reliable access to emergency services, new voice services that cannot provide the general conditions of PATS should be labelled as 'second line' services, and clearly distinct from 'primary' services.

We also think it is important that citizens and consumers are properly educated about VoIP, both in its potential and its limitations in relation to connectivity and call quality, but especially in relation to reliability of emergency access.

Finally we wish to see a regulatory framework across the EU that encourages investment in the IP networks on which new voice services depend, by giving clarity and stability and allowing for an adequate return on investments.

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