Response to Ofcom Draft Annual Plan 2010/11

I was disappointed to discover that the Ofcom Draft Plan for 2010/11 contained no references to improving the 999 service.

In particular there continues to be no regulation covering 999 calls from private VoIP phone systems that are increasingly being deployed in the UK.

Summary of Response

The current regulations regarding 999 are set out in the General Conditions of Entitlement which require that:

"Providers of Publicly Available Telephone Services or Public Telephone Networks.....ensure that end users can access 112 and 999 services free of charge and, where technically feasible, make caller location information available to the emergency services."

In recent years Ofcom has addressed the problems of compliance with this condition in relation to the technical issues associated with location identification for 999 calls made from public VoIP networks.

It is my view that the increasing problems associated with location identification for 999 calls made from private VoIP phone systems also require consideration by Ofcom particularly because it is now not only technically feasible, but also cost effective to deploy an enhanced 999 solution to solve this problem.

By considering this issue Ofcom will be addressing 3 of the 5 overall objectives stated in the Draft Annual Plan:

- support and protect consumers across the UK
- promote competition and innovation
- maintain and strengthen the communications infrastructure in the UK

Furthermore, new regulations for an enhanced 999 system that cover private VoIP phone systems would ensure that UK legislation offers employees and visitors to private premises the same level of protection that is legally available to their counterparts in North America.

Background

The current situation is that the location information provided to the emergency services for 999 calls made from private VoIP phone systems can be misleading, particularly for 999 calls made from larger organisations with multi-site networks.

The problem is that the location information can be imprecise if the call is from a VoIP phone system serving a large office block, campus or factory site.

In this case the 999 operator is made aware only of the civic address of the site and not the precise location of the emergency.

In other words there is no information on the office suite, floor or building where the emergency is taking place.

The problem is significantly worse if the VoIP phone system also serves branch offices.

In this case if a 999 call is made from a branch office in another town or city the 999 operator would be presented with location information that is completely inaccurate.

Imprecise or inaccurate location information can result in delays to the response of the emergency services which could in turn have serious consequences for the person in distress.

This is clearly not a good situation.

It is surprising therefore that Ofcom is not proposing to address this issue in its Draft Plan for 2010/11 given that North America has had for some time strict regulations covering 911 calls from private phone systems, including VoIP phone systems.

These regulations require that organisations operating private phone systems of any description must ensure that 911 calls made from these systems are processed and routed in such a way that the 911 operator is presented with location information that is accurate to within 7,000 sq ft, or containing no more than 48 phones.

This effectively means that employees and visitors to business premises in the UK have less protection than their counterparts in North America.

It may also surprise many employees that they have less protection if they make a 999 call from their workplace than if they made a 999 call from their home.

The main problem in implementing a system that can solve the problem of location identification for 999 calls from VoIP phone systems is that the Public Telephone Networks operated by BT, C&W and others are designed to send only the CLI of the public phone line over which the 999 call is routed.

This CLI references only the civic address of the line termination point in the BT or C&W Emergency Services Location Database.

As explained above this address may be imprecise or completely inaccurate.

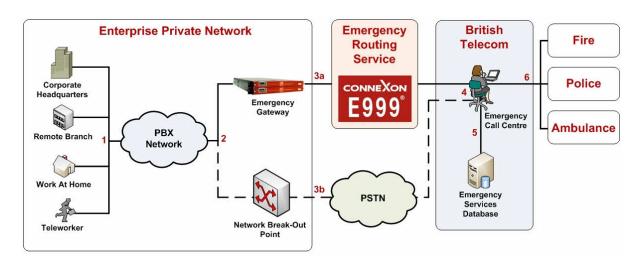
The other problem is that of identifying the location of the 999 caller on the private VoIP network.

This is not a trivial task since one of the key features of VoIP phone systems is that extension numbers and phones are mobile and can be located at any site covered by the private VoIP network, including "off-net" locations where teleworkers connect to the network from any location where there is an internet connection.

In North America there are solutions to these problems which can be readily be deployed in the UK making it technically feasible, at reasonable cost, for organisations to deploy an enhanced 999 solution that will ensure that 999 calls made from their premises present precise and accurate location information to the 999 operator.

My company, ConneXon, will be launching an enhanced 999 service in the UK in early 2010.

This will comprise an on-site appliance that attaches to the VoIP phone system that tracks the location of individual VoIP phones together with an Emergency Routing Service that bypasses the Public Phone network to route 999 calls to the BT operator with a CLI that references the precise location of the caller in the BT Emergency Services Database.



I have attached to this email a schematic of our enhanced 999 solution.

Until there are specific regulations in the UK that require organisations to deploy an enhanced 999 solution we will be relying on organisations treating this problem as a Health & Safety risk and taking an enlightened view of their Corporate Responsibility.