



QoDSL – The Business Impact

Date: March. 2005

Author: Tiscali Product Marketing

Version: 1.1





Introduction

Within this paper we explore the key areas of QoDSL within a business context. We pose a series of questions, and through the answers articulate the business impact of QoDSL. We cover the following key topics:

- [QoDSL – The proposition](#)
- [QoDSL – The applications](#)
- [Business benefits](#)
- [Reseller benefits](#)
- [The importance of early reseller engagement](#)
- [Types of Partners who can benefit from QoDSL](#)
- [QoDSL service availability](#)

1. QoDSL – What is unique about Tiscali's proposition and why is it so special?

The advent of MPLS (Multi Protocol Label Switching) gave IP networks the ability to differentiate between different types of data. MPLS is a software enhancement to the IP network that marks groups of data packets with labels describing how they should be handled as they are routed across the network. Some such as voice or streams of live video are awarded a higher priority, whilst others such as email or routine back ups can be transmitted on an as available basis.

This seemingly innocuous improvement to IP allows prioritised performance by “Class of Service” and gives voice traffic the guaranteed throughput it needs to provide clear uninterrupted calls. This capability is also commonly referred to as Quality of Service (QoS). As such MPLS enabled networks are able to deliver Quality of Service (QoS)

These QoS based IPVPN networks have been used by the larger corporation for a number of years to link together the larger sites. However this technology is not cost effective for smaller sites as the lowest cost access mechanism that can be used has been a leased line.





DSL or broadband networks have also been available to provide connectivity to smaller sites for a number of years. The number of DSL based IPVPN connections has grown dramatically over the last three years as enterprises have taken advantage

of the low cost points offered by DSL technology to link smaller sites and home workers into the corporate LAN infrastructure.

However whilst this connectivity is ideal for data applications such as email and web surfing it is not ideal for the support of voice as the quality is not guaranteed and can therefore vary dependent on the amount of traffic being generated by other applications being used on the same connection, or if used across the internet itself by the level of traffic on the internet at the point in time that the voice call is being made.

In a QoDSL enabled Managed VPN, the QoDSL features in the customer CPE and provider core network intelligently identify and route traffic based on its priority. Uniquely Tiscali provide this QoDSL feature on both contended and non contended links. The importance of this unique offering is that small sites of both large enterprises and smaller enterprises can take advantage of all the data and voice applications that have been available to the larger sites for some time.





2. What obvious applications does QoS enable or enhance immediately?

QoDSL affords both large and smaller enterprises the opportunity to run delay sensitive, real-time applications historically served by leased lines over a contended broadband infrastructure:

- **VoIP** - This is the most prevalent real time application that is sensitive to network delays. As anyone who has used the internet for voice will know any delays in the network dramatically affect the quality of voice delivered to the users. QoDSL allows low cost access to corporate quality networks for smaller sites and home workers , fundamentally changing an Enterprises telephony set-up. Voice calls are now transported across the corporate IPVPN to all site types and can bring a reduction in both infrastructure overheads as there is effectively only one network, and also in inter-site communication bills as site-to-site calls are now seen as on-net and are effectively free of charge.
- **Teleworker Solutions** – One particular example of the application of both QoDSL and VoIP is for home based workers or Teleworkers. Whether these are full time home workers or occasional home workers such as Sales people , Managers, or field based engineers they can now access the full voice and data capabilities of their corporate network as if they were resident in the office, but from their home. For the first time QoDSL allows organisations to deploy cost effectively Teleworkers using the existing infrastructure safe in the knowledge they will experience office quality for both voice and data applications
- **Virtual Call Centres** – QoDSL is revolutionising the way Call Centres are structured. There is now no need to deploy in a single site, QoDSL opens the door to Virtual Call Centres. The ability to offer guaranteed quality voice services alongside data over low cost DSL allows organisations to re-engineer the way they work in order to gain advantages of working in a more distributed approach – small offices can be connected quickly and cost effectively or can be quickly scaled up or down. Teleworking is a natural extension of virtual call centres where a group of homeworkers of any size can be utilised to cost effectively offer time based cover and employment hot spots can be targeted.
- **Business Applications** – Business applications such as video conferencing, company wide broadcasts and E-Learning can be fully utilised without the historical costs concerns of using on a separate infrastructure and then incurring usage costs. These applications can be





used simultaneously with voice broadcast or direct one to one telephone calls all over the same low cost QoDSL connection.





3. What are the business benefits for users?

Given the current economic backdrop, businesses have a difficult Information and Communications Technology (ICT) balancing act. They are challenged with having to achieve more, with less.

Senior executives are challenged with maintaining (or even reducing) costs, complexity and risk, whilst at the same time increasing innovation, capacity, employee productivity and security – Not a simple balancing act.

QoDSL has a major role to play in delivering solutions to these key issues – with real business benefit:

Reducing

- [Costs](#)
- [Complexity](#)
- [Risk](#)

Increasing

- [Innovation](#)
- [Capacity](#)
- [Employee Productivity & Security](#)

- **Reducing Costs:**

The benefits of QoDSL are much deeper than reduced call charges – IPVPN transported inter-site voice calls, at no extra cost. With QoDSL, a multi-location business can address their 'Total Cost of Ownership' (TCO) model through reduced connectivity and infrastructure costs. There is a double impact here. Firstly an immediate boost to the bottom line quickly followed by new business opportunities delivered through application and capability deployment - creating value

- **Reducing Complexity:**

QoDSL is a simple to deploy convergence enabler – particularly for connectivity from a main site to smaller sites and remote employees (Teleworkers, road-warriors and virtual call centre operators). Before QoDSL, IPVPNs were outside many businesses economic and IT management reach for small site connectivity. If Quality of Service (QoS) was required in these environments then the traditional route was to install leased lines or an equivalent. Now with the prevalence of broadband and the introduction of QoDSL by Tiscali a new option is presented. Guaranteed quality of service through to the edge of the network where employees and customers are – Giving businesses cost effective and easy to manage VoIP.





On top of this, being based on an IP infrastructure all the applications as well as the core network can be managed from one point reducing TCO and IT resource requirements.

- **Reducing Risk:**

Tiscali's QoDSL service is backed by a Service Level Guarantee (SLG). This ensures that all the parameters that measure the quality of prioritised traffic (voice) are maintained to a similar and measurable level to standard PSTN traffic.

The QoDSL service utilises the same MPLS network that is used to maintain the Tiscali network for all other carrier grade service (incl. leased lines). The only difference is that access to the Tiscali network is provided via cost efficient DSL (broadband) connections – with Quality guaranteed through to each end connection either at the remote office or employee's home.

- **Increasing Innovation**

With DSL connectivity comes greater flexibility. This flexibility, or speed to deployment allows for infrastructure changes to be made quickly and in line with business objectives – with pace. QoDSL allows businesses to support their strategies and objectives by deploying 'Applications over IP' across their organisation, rapidly. For example with our QoDSL solutions a business can quickly turn on VoIP to a new site or decide to implement a CCTV or remote training strategy (managed from a central point) within days - not weeks.

- **Increasing Capacity:**

Given a limited ICT budget, QoDSL allows a business to increase the reach and capacity of their network – efficiently. Tiscali are a specialist provider of DSL connections – in large volumes. Business now has the opportunity to augment their network architecture and reduce the cost of connectivity across their 'network' and/or increase the availability of access to the corporate LAN – driving better communication across their organisation. Specifically a business can gain greater capacity from a fixed budget by 1) reducing costs by converting leased lines to DSL or 2) increase efficiencies by converting dial-up to DSL.

Additionally QoS can be deployed flexibly – as driven by business requirements. Initially a high level of contention can be secured with a service upgrade further down the line.

- **Increasing Employee Productivity & Security:**

QoDSL helps increase staff productivity as well as maintaining security through the utilisation of the Tiscali MPLS network.

QoDSL enables remote sites (and employees) to take advantage of all the data and voice applications that traditionally have only been available to the large site – at a favourable price point and on a 'fast' connection (similar to an ASP model). This speeding up of processing times reduces employee idle





time. The wider availability of applications leads to businesses being able to benefit from flexible working, cross team collaboration and greater employee empowerment – whilst aligning to the latest EU legislation and working time directives.

Additionally Business Continuity and Security are increasing business concerns. With the flexibility and rapid deployment of DSL connectivity (or cost efficient redundancy options now open) disaster recovery plans can be reviewed and costs savings made at the same time as increasing back up and increased contingency levels.





4. What are the benefits to a Tiscali 'Reseller' - what applications can you see and how can you in turn add value?

The benefits to the Partner are obvious:

Whereas Tiscali's skills are based on the WAN infrastructure, especially the MPLS IPVPN, the re-seller or partner brings both knowledge of the end users business and expertise built around the end customer's LAN and Voice infrastructures – the supply, maintenance, monitoring and support of that element of the whole technology infrastructure. Tiscali with the QoDSL offering can bring

Every component of a customer's technology infrastructure (LAN and VPN) needs to support voice and other real time applications in a reliable and scalable way. The partners and re-sellers work with customers to design, deploy and support bespoke solutions that deliver tangible business benefits.

In addition many re-sellers have developed close working relationships with their own manufacturing partners that mean they are able to build on best practice design models from those partners to deliver networks that fit customer technical and commercial needs.

For these reasons Tiscali do not operate a direct sales model but only operate with partners.

5. How important is it that resellers get involved early and exploit opportunities?

The Tiscali QoDSL service is unique and offers re-sellers a singular opportunity to start taking advantage of the growing VoIP market. It allows the re-sellers a first opportunity to work with smaller organisations to assist in cost effective deployments of VoIP and also the opportunity to bring their valuable skills as larger enterprises deploy QoDSL based homeworkers.





6. What type of reseller/partner is most likely to benefit from working with Tiscali?

Resellers and Partners with experience of delivering IP based PBxs, Soft PBxs from any manufacturer are ideally placed to take advantage of this new unique capability. In the near future Tiscali will be bringing to market packaged offerings of QoDSL and voice minutes that will also allow CPS resellers and ISPs the opportunity to exploit this technology into their customer bases.

7. Where in the UK is the service available, what about costs and what is the order process like?

The Tiscali QoDSL service is available on the majority of BT exchanges delivering services to business. Typical deployments have shown that this service should be available to 90% of the business population, and more than 70% of home workers.

