

Nortel Response to Ofcom New Voice Services Consultation

Introductory Summary

As an acknowledged world leader in communications networking solutions, Nortel welcomes the opportunity to participate in the public consultation on the appropriate consumer protection measures which should apply to new voice services. As a company providing network infrastructure and technology to service providers (public carriers, cable operators, wireless operators) and to enterprises (businesses and institutions of all types) in more than 150 countries, Nortel is able to leverage its vast technology expertise – and experienced leadership in both PSTN and IP technologies – in responding to this consultation and similar consultations under consideration by the European Commission and other National Regulatory Authorities (NRAs).

Nortel believes that Voice over Internet Protocol (VoIP) is the only way of delivering all voice in the context of Next Generation architectures. Such solutions provide both business and the consumer opportunities for substantial cost savings and innovative new services. Carriers are already deploying 'all IP architectures' and business enterprises are currently driving demand by choosing to invest. As a result, Nortel foresees IP in the core of the network within the next two years and a move to 'all IP' architectures in the three to five year timescale.

The key differential in discussing regulation of all voice services is whether they are subject to the regulatory construct Publicly Available Telephone Service (PATS) or whether they are defined simply as a non-PATS Public Electronic Communication Service (PECS). PATS entails certain regulatory requirements which in return deliver specific benefits such as number portability. It is Nortel's view that new voice services classified as PECS should not be subject to regulation. In order to empower consumers to make informed decisions in this new non-regulatory environment, Nortel supports the concept of a consumer information policy facilitated by a co-regulatory approach. Viable business cases for new voice services will flourish in an environment of innovation, competition and technology neutral and minimal regulation. It is Nortel's view that new voice services should also be encouraged to have the flexibility to offer PATS like services, such as access to emergency numbers on a best efforts basis, without triggering full PATS regulation.

➤ Types of New Services

Question 1: What types of new voice services do you envisage becoming available in the future and what characteristics will they have that distinguish them from traditional voice services?

Answer: It is crucial that a line be drawn in the sand differentiating traditional voice services offered by PATS and new voice services offered by PECS. New voice PECS should not be regulated to ensure certain traditional standards but instead follow co-regulatory guidance to ensure consumer protection. Whilst some new voice services may appear very similar to traditional voice services regulated by PATS, others may offer different levels of quality, new features and cost. The development and ever-increasing take-up of broadband means that there are new and potentially cheaper ways of delivering traditional voice services as well as a much wider range of new services

and flexibility. Mobility is a key feature that can be offered by new voice services - IP telephones providing PECS will be easily portable offering the consumer complete mobility and flexibility. Such telephones may not look like traditional telephones but be no more than soft phones on PCs and PDAs. The features offered by new voice services such as for example, instant voice messages are only limited by human imagination. Huge leaps in innovation and new features are expected to come to market in the recent future. This will result in increasingly levels to fixed and mobile substitution as features overlap and the consumer is empowered to choose the voice services that meet their individual requirements.

➤ Policy Challenges

Question 2: What are the main policy challenges raised by the introduction of new voice services for consumer protection and regulation?

Question 5: Are there other key policy questions that Ofcom should be considering?

Answer: Nortel agrees with Ofcom that a balance needs to be struck between creating the right conditions in which new voice services and new providers can enter the market, and ensuring that consumers are properly informed. Such a balance would be of great benefit to the economy and society and be complementary to Ofcom's principal duty to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. Consumers will have the opportunity to benefit greatly from a competitive range of new innovative services and reduced costs but must also be aware that the range of products available will offer different levels of quality and service attribute meeting consumers' individual requirements. Crucially the consumer will need to be aware whether their chosen voice service is subject to a level of regulation that they are comfortable with.

➤ Ofcom Aims

Question 3: Do you agree with the initial top level aims identified by Ofcom?

Question 4: Are there other aims and criteria that Ofcom should consider?

Answer: Nortel agrees with the top level aims identified by Ofcom but draws attention to the need for these aims not to be country specific but thinking to be shared with other NRAs. Voice services delivered over Next Generation Networks will remove many of today's requirements on 'who does what' and 'where'. They enable 'tunnels' to be constructed to connect an end user to any server, enabling services to be provided from anywhere in the network and anywhere in the world. A server can be connected to a portion of the network owned by a carrier or an enterprise. Indeed, the distinction between carrier and enterprise solutions becomes a question of who owns what network component and where it is located. An individual teleworking from their home or hotel or on the move and using mobile or nomadic wireless access can receive either from a carrier or from his or her own company network. Regardless of who provides the service, the server hosting it can be located in another country. It is therefore crucial that new voice services regulation is harmonised across Europe. Country specific regulatory variants will only increase cost and hold back the benefits of a future network. Nortel firmly supports Ofcom's participation in regulatory policy discussions held at the

international level amongst NRAs and the European Commission not least Ofcom's active participation in the VoIP sub-group of the European Regulators Group.

➤ **Distinction Between Voice Services**

Question 6: Do you agree with Ofcom's initial view that it is not necessary for all voice services to provide the same standard features as traditional telephone services, and that we should instead focus on enabling consumers to make informed decisions?

Question 7: Do you agree with Ofcom's initial view that it is not desirable to draw a distinction between the regulation of services that look like traditional services and those that do not?

Question 8: Do you agree with Ofcom's initial view that a distinction should not be drawn between the regulation of 'second line' services and 'primary' services?

Question 9: Do you think that a threshold should be set at which new voice services should be required offer the same features as traditional voice services? If so, how should the threshold be set?

Answer: The EU Directives require that every EU citizen can subscribe to a PATS and such PATS should be regulated in a clearly different way. Nortel concurs with Ofcom that it is not necessary for all voice services, even those that look like PATS, to provide the same features as traditional telephone services. The empowerment of consumers is key to the success of new voice services and to ensuring consumer protection.

It is also important to consider whether it is sufficient for consumers to rely on a voice service which may only offer 'best efforts' for access to emergency numbers or whether every primary line should be PATS compliant in the interest of public safety. However, as it would be impossible to ensure that every household maintains a PATS and also as many new voice services are likely to become indistinguishable from a PATS it would be very difficult to impose such a rule. The only viable option is to ensure that all consumers are appropriately informed of the features offered by their voice services. It would not be appropriate to set a threshold for new voice services to offer the same features as traditional voice services as this may make some business plans unviable and put at jeopardy consumers' selected voice service.

➤ **Emergency Calls**

Question 10: Do you agree that most providers would want to offer at least a basic form of access to 999?

Question 11: Do you agree with Ofcom's initial view that consumers sufficiently value having access to 999 in order for them to wish to retain at least one means of 'high quality' (very reliable) access to 999 at home?

Question 12: Do you agree with Ofcom's initial view that not all voice services should be required to offer access to 999 but that decisions about subscribing to and using such services must be properly informed?

Question 13: Do you agree with Ofcom's initial view that given some new services may not be able to offer the same degree of reliability for emergency calls as traditional voice services, it is better that these services are able to provide less reliable access to 999 rather than preventing them from offering any access at all?

Answer: Whilst Nortel believes that all voice services should be allowed to provide access to emergency services, any obligation on a non-PATS provider to provide emergency access could destroy an otherwise valid business case and deprive consumers of innovative services. While the non-PATS provider should not be mandated to include access to emergency services in its offering, the consumer should be properly informed of the emergency access features and capabilities of the service offered. It is also important to note that whilst Caller Line Identification (CLI) can be provided with some new voice services to identify the call, the provision of reliable location information is more problematic. An example of how location information can be provided for VoIP services is the example offered by the US VoIP provider 'Vonage', where the customer is properly informed about the nature and (limited) capabilities of the '911' service including that log-in registration of the consumers location is the methodology to facilitate location information and subsequent access to emergency service if required. In the interest of public safety it is evident that a 'best efforts' access to emergency calls is preferable to no access at all and that there are numerous ways of keeping consumers informed of the level of service on offer.

➤ PATS

Question 14: Do you agree with Ofcom's assessment of the costs and incentives for providers offering PATS?

Question 15: Do you agree with Ofcom's understanding of the implications of the definition of PATS contained in the Directives?

Question 16: Do you agree with Ofcom's understanding of the implications of this alternative approach?

Question 17: Are there policy initiatives in other areas related to new voice services that Ofcom should be considering?

Question 18: Although Ofcom is not consulting on its interim position, it would welcome your views on its interim policy to forbear from enforcing PATS obligations against new voice services which offer access to 999.

Answer: Nortel welcomes Ofcom's approach to PATS and fully supports the interim position to forbear from enforcing PATS obligations against new voice services which offer access to emergency services.

Nortel can see why Ofcom has come to its view regarding understanding the implications of PATS contained in the Directives. However, such interpretation would be problematic. Nortel would be very concerned if Ofcom's interpretation meant that providing a 'PATS like' service would automatically trigger full PATS regulation. The result would likely lead to some service providers deliberately excluding certain services such as access to emergency services to avoid being caught by full regulation. Such a scenario would deny consumers choice.

➤ Network Integrity

Question 19: Is it reasonable to have different network integrity requirements for nomadic services compared to services at a fixed location, and how should consumers be made aware of this difference?

Question 20: Do you think that it is better for Ofcom to:

- 1. Retain the Essential Requirements Guidelines in their current form;
- 2. Re-issue the Essential Requirements Guidelines, incorporating additional guidance in relation to Voice over Broadband and Next Generation Networks; or
- 3. Withdraw the Essential Requirements Guidelines, and apply the 'reasonably practical' test set out in General Condition 3

Question 21: Do you think that there are reasonably practical measures that providers at a fixed location can take even if they do not directly control the underlying network?

Question 22: What in practice should the roles of the network provider versus the service provider be for network integrity when the network provider has no control over the services offered over their network?

Answer: Nortel agrees that retaining the Essential Requirements Guidelines in their current form would be inappropriate since much of the specific guidance would be inappropriate for VoIP and Next Generation Networks. Instead a 'reasonably practical' test should be applied on a case-by-case basis.

In the interests of consumer protection in the delivery of PATS a consumer single point of contact is required to meet any challenges posed by network integrity. However, in the future of packet based Next Generation Networks, service and connectivity are unbundled which means that different network layers are provided by different providers. Therefore, it would no longer be appropriate to assume that a service provider has ownership or jurisdiction over all the network layers to provide a service e.g. with such new voice services the customer may be responsible for their own broadband access.

In the case of PATS the network and service provider have to work together for the service provider to be responsible for bundling the service and making sure all underlying elements are operational. For a PECS provided the consumer understands the type of service they are receiving this should be sufficient.

➤ Line Powering

Question 23: Do you agree that it is likely to be reasonably practical for analogue telephone and ISDN2 services to provide line powering but not other services?

Answer: Nortel believes that the requirement for in-line powering of terminals stems from a PSTN-based environment and thinking which is out of date. Given recent technological developments in batteries for consumer products, mandating in-line powering for VoIP terminals would appear to ignore technological developments and the widespread acceptance of the use of batteries in terminals. With the further deployment of fibre networks in the access, line powering will cease to be practical.

➤ Location Information

Question 24: What are your views on the technical feasibility of providing location information for nomadic services, both now and in the future?

Question 25: What approach for emergency location would take account of current technical limitations, whilst ensuring that technical advances bring benefits to emergency organisations in the long run?

Answer: Location information should only be mandated for PATS. Whilst location information can be provided for some new voice services, reliable location information may be more problematic. Services including 'Vonage' facilitate location tracking through log-in providing self-certified location information and therefore access to emergency services is an appropriate service. On 16th March 2004, Nortel presented at the National Emergency Association's Technical Development Conference in Orlando (Florida, USA) solutions for routing, delivery and location identification of an emergency call from a potentially nomadic or mobile VoIP device. However, it should be noted that the success of the proposed solution ultimately will depend on the degree of cooperation amongst all players – vendors, operators, national authorities - involved.

➤ Consumer Information

Question 26: Do you agree that consumer information is required where services look and feel like a traditional telephone service but not where services are clearly different (e.g. PC based services)?

Question 27: Do you agree with a two stage approach to consumer information, first to ensure the purchaser is aware of the nature of the service at the point of purchase, and second to ensure all potential users are aware the service does not provide access to 999 at the point of use?

Question 28: If consumer information is required to ensure that consumer interests are protected, which of the above regulatory framework, if any, is appropriate to ensure it is successful?

Answer: Nortel believes that consumer information is required for all new voice services and supports the two stage approach in relation to access to emergency services. Co-regulation would be the most effective approach to ensuring the success of new services and protection of consumer interests for Non-PATS. There are certain aspects of new voice services that must be brought to the consumers' attention including that access to emergency services may be 'best efforts' or non-existent. A check-list approach against traditional PATS services would provide a clear list of services on offer or whether quality was 'best efforts' or variable. It would also be worth considering a simple labeling solution or trust mark scheme indicating a level of quality that would be easy to understand. Service providers would also be able to demonstrate the benefits of their offering in contrast to the level of differentiation with traditional voice services.

Concluding Remarks

Large-scale investments required to build Next Generation Networks are crucial to the success of the knowledge driven economy. However, investment in innovation will only happen in a predictable regulatory environment. It is crucial that the attributes of PATS are properly defined. New voice services defined by PECS should be allowed to flourish in a transparent, stable and technology neutral regime with minimal regulation. In the interests of the citizen these new services should not be prevented from offering traditional services offered by PATs such as access to emergency services. It is imperative that issues surrounding the delivery of voice services relating to location information of emergency calls and also the powering of end user terminals are

addressed urgently. For new voice services to be successful in the UK and EU it is imperative that regulation be harmonised across all Member States to the largest extent possible to allow for economies of scale throughout the supply chain. It would be disastrous if the lack of resolution of such issues were to lead to a requirement on an operator to maintain legacy PSTN infrastructure beyond the time it was economically feasible to do so. Finally, Nortel looks forward to seeing formal regulatory guidance on the regulation of new voice services as soon as possible as market players are either rolling out new services or are in the process of making important investment decisions in this area.

About Nortel

Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Serving both service provider and enterprise customers, Nortel delivers innovative technology solutions encompassing end-to-end broadband, Voice over IP, multimedia services and applications, and wireless broadband designed to help people solve the world's greatest challenges. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at www.nortel.com. For the latest Nortel news, visit www.nortel.com/news.