

Ericsson response to Ofcom's Regulation of VoIP Services Consultation

Ericsson welcomes the opportunity to comment on Ofcom's "Regulation of VoIP Services" consultation and offers the following general and detailed comments in response.

General comments on regulation of VoIP services

- Voice over Internet Protocol, or VoIP permits transport of voice traffic using Internet Protocol (IP). It is network and technology agnostic; it can travel on carrier networks, private networks, and the public Internet via wireline, wireless, cable, power line, or satellite infrastructures.
- Although very promising, VoIP is still in the nascent stages of development, deployment and customer adoption. There are still some significant technical hurdles associated with VoIP, especially in ensuring security. These issues require industry-led standardized solutions, which are still under development. Ericsson supports and actively contributes to the standardization processes, such as those based on the IP Multimedia Subsystem (IMS) defined by 3GPP.
- Ericsson believes that when the characteristics of VoIP services are functionally similar to those of traditional circuit-switched voice services, both should be subject to the same regulatory requirements.
- Regulators should impose only that regulation which is necessary and likely to protect the public interest.
- Global harmonisation of the regulatory requirements pertaining to IP-enabled services, and specifically those that may apply to VoIP is important. In the EU, Ericsson strongly favors harmonised regulation on a European level as opposed to differences in regulation between the member states.

Specific comments in response to the consultation questions

Question 1: Given recent developments, do you agree that Ofcom's focus should be on the following three objectives in developing our policy for VoIP services, namely (in so far as is possible)

- (i) enabling innovation in a technological neutral way,
- (ii) ensuring consumers are well informed, and
- (iii) ensuring maximum availability of 999 services?

Yes, these are reasonable objectives.

Question 2: Do respondents agree with this approach for the interaction between network providers and PATS providers?

The proposal is for PATS providers to ensure network integrity through the development of appropriate service level agreements with the relevant network provider or providers. It is likely that this approach will be more successful if the service level agreements are based on recognised industry standards. However considerable difficulties may arise where many parties are involved in the delivery of a specific service. This is an area that Ofcom should continue to monitor, it would be a retrograde step if the end result were to be an erosion of the levels of reliability, availability and resilience which fixed and mobile voice service networks have delivered to date.

Question 3: Do you agree that the limitation of GC 3 obligation to providers of service at a 'fixed location' is not sustainable in the long term? What views do you have on how this may be addressed?

It seems likely that, in the medium term, fixed-mobile convergence will make the definition of "a service at a fixed location" unsustainable. However this is not currently a problem and, in the first instance, the market should be left to address this issue, with Ofcom stepping in later if a market failure can be demonstrated.

Question 4: In light of the other measures proposed in this document, are there particular issues in relation to VOIP services that should be addressed in this review?

No comment

Question 5: Are there particular issues in relation to VoIP services that should be addressed in this review?

Please refer to the Ericsson response to the European Commission's call for input (Jan 2006), which is appended, to this response.

Question 6: Do you have any comments on Ofcom's proposed modification to the PATS definition in GC 18?

Ericsson strongly favors harmonised regulation on a European level as opposed to differences in regulation between member states. A review of definitions is part of the current EU review, the UK definition of PATS should be kept in line with the EU definition.

Question 7: Do you agree with the proposed application of the code?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However, it is important that the code should be applied in a technology neutral fashion and not aimed at VoIP services simply because they use VoIP technology. There are likely to be services that use VoIP technology, either in whole or part, to replicate traditional voice services, it would be inappropriate for these services to be covered by a code which did not cover similar services delivered by traditional technology.

Question 8: Do you agree with the proposed approach for informing consumers that services may cease to function if the broadband connection fails or there is a power cut or failure?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 9: Do you agree with the proposed approach for informing customers where access to emergency calls is not available?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 10: Do you agree with the proposed approach for informing consumers that access to emergency calls may cease to function if the Data Network fails or there is a power cut/ failure?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 11: Should the code be extended to point of signature acknowledgement in respect of reliability of access to emergency calls?

No comment.

Question 12: Do you agree with the proposed approach to location information providers where the service does provide access to emergency calls? In particular, do you believe that subscribers should be required to register their main location prior to activation of the service?

It seems reasonable to require users to register their location prior to activation of the service. However where the service is used in a nomadic mode, it would seem likely that users may well fail to update their location or may well not be accurately aware of their location. It may be sensible to ask users if they intend to use the service in a nomadic mode so as to be able to identify cases where location information may not be reliable.

Also emergency calls from VoIP services will only work if the PSAPs are able to effectively handle these calls from an organizational and technical perspective.

Ericsson strongly favors harmonised regulation on a European level and supports the work of the Expert Group on Emergency Access in this area.

Question 13: Do you agree with the proposed approach to informing consumers where services do not provide emergency location information?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 14: Do you agree with the proposed approach to informing customers where services do not provide number portability?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 15: Do you agree with the proposed approach to informing consumers about the types of facilities that might not be available, but which they have come to expect from a telephone service?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 16: Do you agree with Ofcom's view that all aspects of the code of practice should be mandatory?

Yes, since this is an industry-generated code of practice there would seem to be no reason why it should not be mandatory. By being prepared to make the code mandatory, the industry strengthens the case for self-regulation in appropriate areas.

Question 17: Do you consider that the overall programme of activities is appropriate?

Yes, Ericsson supports the general principle that consumers need to be effectively informed on the nature of the service they are purchasing. However see additional comments to question 7.

Question 18: In light of Ofcom's Consumer Policy Review, are there other consumer education measures that Ofcom should consider?

No comment

Question 19: Do you have comments on this proposed enforcement approach?

No comment

Question 20: Are there other areas of research activity that Ofcom should consider to ensure it understands market developments?

No comment

Question 21: In relation to ensuring high availability of 999 access, are there other measures that Ofcom could consider?

Ofcom should monitor the trend in access to high availability emergency services to establish if this is likely to be a cause for concern.

Also emergency calls from VoIP services will only work if the PSAPs are able to effectively handle these calls from an organizational and technical perspective.

Ericsson strongly favors harmonised regulation on a European level and supports the work of the Expert Group on Emergency Access in this area.

Question 22: Do you agree with Ofcom's approach to naked DSL?

Yes, Ericsson supports the approach of not regulating until it is clear that the market has failed.

Question 23: Do you agree a cross industry meeting would be a useful approach to move this issue forward? What other steps could be taken to provide support for 056 numbers?

Yes, if a number range is approved and numbers are allocated, then users should be able to rely on connectivity.

Question 24: How can a VoIP call be traced for detection and prevention of malicious and nuisance calls? How could a suitable call screening service work in a VoIP network?

No comment.

Question 25: Do you agree that SPIT could be a potential problem and what techniques can be used to minimise the impact of SPIT on consumers of VoIP services.

No comment.

Question 26: Have there been any instances of a VoIP service being compromised or used to deliver malware or a DoS attack?

No comment.

Question 27: Are there any other considerations that need to be taken into account when a provider does not have a UK entity?

No comment.

Question 28: Is it reasonable to ask VoIP service providers to participate in schemes designed for e-commerce?

No comment.

Question 29: Do you have any other comments on the proposed approach to investigating the application of the GCs applicable to providers of PATS in the context of VoIP?

No comment.

Question 30: Do you have any comments on Ofcom's views on the meaning of above mentioned terms and legal concepts?

No comment.

Question 31: Are there any other steps that a VoIP service provider could consider in respect of the IP network layer and service application layers to ensure network integrity?

No further comment.

Question 32: Are there any other steps that a VoIP service provider could consider in respect of parts of the underlying network that they do not control?

No further comment.

Question 33: What additional steps could a VoIP service provider take to support nomadic users with regard to maintaining network integrity?

No further comment.

Question 34: Do respondents consider whether other options to ensure continuity in the case of a power outage are appropriate?

No comment.

Question 35: What other steps could be taken to provide reliable location to assist the emergency services in their work?

No further comment.

Question 36: What other steps could be taken to provide reliable location to assist the emergency services in their work in the case of nomadic users?

No further comment.

Question 37: In addition to participating in the NICC working group on providing location in IP networks and the 112 expert group, what other steps should Ofcom take?

No comment.

Ericsson contact:

John.Newbold@ericsson.com
+44 2479 569607

Appendix A: Ericsson response to the EC call for input (Jan 2006)

**Ericsson response to the European Commission's
Call for Input
on the forthcoming review of the
EU regulatory framework for electronic communications and services
Including review of the Recommendation on relevant markets**

General comments

Ericsson welcomes the opportunity to provide its views on the review of the regulatory framework. As ICT is an important driver for growth as defined in the Commission's Lisbon strategy, it is of the essence to ensure that regulation governing the electronic communications sector fosters innovation and economic growth.

The updated EU regulatory framework will determine the regulatory landscape for the coming decade, so it is important that it can cope with foreseen and unforeseen changes in the market. Stable and predictable regulatory principles are important prerequisites for the significant investments needed to deploy infrastructures and services.

Ericsson will follow the forthcoming discussions and may provide more detailed comments later on in the consultation process.

Scope and objectives

In general, the goals set by the current regulatory framework are sound, but adjustments are needed to future proof the framework. Transposition and implementation of the current framework by the member states has been slow and fragmented. Complex requirements, especially regarding the market analyses, and the absence of firm guidance from the Commission, have led to different approaches in the member states. A more vigorous pursuit of a common European approach will lead to a more clear and predictable regulatory environment, necessary to stimulate innovation and investment.

Convergence and technological development:

Convergence and technological developments are the motor for innovation, investment and increasing competition. Convergence leads to a decoupling of services and infrastructure that lowers barriers to entry, accelerates a horizontal reorganisation of the industry, and enhances the value of software for networking. The regulatory framework should foster these developments.

The current framework relies on identifying clearly defined markets and then examining them for evidence of SMP. Convergence and technological developments such as next –generation networks and services blur the market boundaries to the point where this approach may not be sustainable. In this context, definitions such as for PATS and ECS need to be carefully

examined and with it the current notion of universal service which rests on the definition of PATS.

Single market aspects

The success of new services on a pan-European level is to a large extent commensurate with the degree of harmonisation of the regulatory requirements in the member states. Although promoting the single market is a central aim of the framework, in practice, there are considerable differences in the regulatory environments of the member states. These are the result of:

- Untimely and incorrect implementation of the regulatory framework by the member states.
- The different ways individual national regulators deal with new technological developments and convergence, such as voice over IP. The expectation that the Commission's 2004 consultation on VoIP would lead to clear Commission guidance on the regulatory status of VoIP for member states has not materialized. Discussions in the ERG have made clear that there are deep differences between the approaches of the national regulators, resulting in no more than a Common Statement on VoIP. The Commission appears to have adopted the role of monitor, rather than that of leader.
- The different ways NRAs in define markets and apply remedies. While it is clear that a strict 'one size fits all' regulatory approach in all member states is not realistic and desirable, NRA's currently adopt quite different approaches as in the case of VoIP, leading to uncertainty and unpredictability. Part of the problem is attributable to the complexity and sheer number of required market assessments.

The Commission should be more active in enforcing a common European approach. We suggest closer involvement of the Commission in the market assessment processes of the individual NRAs. This would include more guidance such as in the form of educational courses for NRAs in cooperation with the ERG on how to deal with definitions and markets.

Communications services providers increasingly operate on international markets. The common European approach should be compared to the approach in other markets such as the US, to ensure that the EU approach does not put the European Union at a comparative disadvantage.

Article 7 procedures (Framework Directive)

In itself, the goals and objectives of article 7 are still valid. The fact that a number of member states have not yet fully implemented the obligations arising out of the NRF, is in part due to overly complex procedures and requirements, which require simplification.

Spectrum management

The spectrum resource and the need for harmonisation of its use.

Spectrum is a key resource for the development of wireless broadband and ICT in Europe. The availability of harmonised spectrum for commercial usage is therefore essential for competitiveness and attractiveness. The continued development of wireless broadband and ICT

puts an increased pressure on radio spectrum resources. Although it is often quite technical, spectrum policy issues must be addressed at the highest political level, in addition to the normal channels through CEPT/ECC.

Close co-operation between regulatory authorities and industry in regional and international fora has resulted in significant spectrum harmonisation, which has facilitated the emergence of widely adopted commercial mobile services that has greatly benefited European society and industry. Many spectrum bands are however still fragmented or underutilized and continued harmonisation in terms of frequencies and rules would benefit the European market by enabling more economies of scale and by facilitating the deployment of pan-European products and services.

The digital television switch-over and the management of the digital dividend are prime examples of opportunities for harmonisation of the European spectrum environment

Institutional and organisational issues

At the European level, clarification is needed of the respective roles of the Community mechanisms (Radio Spectrum Committee, Radio Spectrum Policy Group) and CEPT/ECC. European industry participation is an important element to secure input on market and technological developments and requirements into the policy process. Consensus should be sought as widely as possible across Europe e.g. through the CEPT processes, supplemented with EU Decisions when added value can be created.

The review of the electronic communications framework should be an opportunity to adapt current regulatory institutions to the datacom/telecom/broadcasting/media convergence. In a number of Member States, the audiovisual services and electronic communications services, including spectrum, are regulated by distinct organisations. This jurisdictional separation is not in line with the convergence of networks and services, and may negatively impact market developments.

A market-based approach to harmonisation

Ericsson supports the introduction of a more market-based approach for open standards and harmonised usage on a Europe-wide basis. Licensed as well as unlicensed spectrum usage has proven to be a significant driver for the market. Notably wide-area solutions (GSM and 3G/UMTS) as well as local/personal-area solutions (wireless LANs and Bluetooth) have proven to be very valuable to the public creating big societal and economic benefits. Future use is expected to contribute significantly to wireless broadband penetration, especially in rural areas.

Ericsson strongly recommends that the revised framework includes the objective of reserving additional commercial spectrum for both the licensed and unlicensed models to meet the requirements of wireless broadband and converging services. Identification of additional allocations of spectrum for new mobile broadband usage is a big challenge. Europe has a great opportunity in designating spectrum in the ranges 2700 – 2900 MHz, 3400 – 4200 MHz and 4400 – 5000 MHz for mobile broadband services. Ericsson suggests that the revised framework establishes some common principle for the harmonised use of IMT-2000 and systems beyond IMT-2000 (IMT-Advanced) in these bands.

Competition and access regulation

Ericsson fully supports the current requirements on national regulatory authorities to promote competition in networks and services, and to encourage efficient investment in infrastructures. The present framework relies on identifying clearly defined markets and then examining them for evidence of SMP. As we already have stated, next –generation networks blur the market boundaries to the point where this approach may not be sustainable. In addition, telecom operators are facing increasing competition from applications providers, which provide their services such as VoIP over any IP-based network. These application providers are subject only to competition law, not to ex ante regulatory requirements.

We recommend the following steps to remove unnecessary ex-ante regulation:

- The market assessments required by the Recommendation are very time and resource consuming for NRAs, the Commission and operators. It is not just the sheer number of markets that have to be reviewed, but also the increased number of appeals and court cases. Efficiency and effectiveness will improve when the NRAs and the Commission can focus their efforts on markets with enduring competition bottlenecks. Therefore, Ericsson urges the Commission to, in line with the Commission's better regulation initiative, carefully review the list of markets with a view to reduce regulation. Candidates for removal would include all retail markets as well as Market 15, Access and call origination on public mobile telephone networks and Market 17, wholesale national market for international roaming on public mobile networks, is a candidate for removal, as it appears that there is no national market where an operator has SMP.
- There should be a clear migration path from ex ante sector specific regulation toward competition law. Regulatory intervention should be contingent on abuse of a dominant position rather than having a dominant position per se. Acknowledging that competition remedies often come too late, Ericsson suggests to introduce a fast –track remedy process based on competition law, where regulators can introduce provisional remedies based on evidence of abuse, which then can be tested in court.
- In addition, the definition of "new and emerging" markets in recital 27 of the Framework Directive should be clarified. With the emergence of new services, infrastructures and markets, it is important to ensure regulatory clarity and predictability in order to stimulate, rather than hold back these developments. Examples include Next Generation Networks and VoIP.

We believe that market assessments should focus on national and international markets and not be extended to open up the possibility for NRA's to regulate regional markets.

Authorisations and rights of use

The current system of authorisations is an appropriate model. Even with full competition, internationally coordinated regulation will be needed regarding spectrum; numbering, naming and addressing; and rights of way.

Consumer protection, citizens' interests and users' rights

The provisions in the current Framework Directive regarding consumer protection, citizens' interests and users' rights are adequate. Again, the more uniform the implementation by the Member states, the better.

Technological developments, leading to new services irrespective of delivery platforms are increasing the freedom of choice for users. Unhappy consumers will vote with their feet and take their business to other service providers. It is important that consumers can make informed choices. The provisions of horizontal consumer protection, which apply to all Services of General Interest, including the telecommunications sector, provide adequate protection.

Privacy and security

The current provisions in the regulatory framework on privacy and security do not require changes. Policy initiatives aimed at increasing security and reducing vulnerabilities are likely to lead to increased requirements regarding public safety, as well as requirements on data and network security and resiliency (such as regarding data retention, lawful interception, access to emergency numbers, location information, redundancy and quality of service. Ericsson favours a harmonised EU wide and where possible global approach.

Institutional aspects

As stated before, harmonisation is essential to the development of the Internal Market. The current mechanisms have not succeeded in preventing an a-synchronous implementation of the regulatory framework by the member states (both in time and interpretation). The Commission should to be more active to claim its central role in the process. Transparency throughout the policy –making and policy implementation process should be improved, as well as opportunities for industry involvement

Ericsson contact:

Walter.Kroeze@ericsson.com

+32 2 737 0556