

Skype Communications S.à.r.l. (hereafter 'Skype' www.skype.com) is a Luxembourgbased provider of peer-to-peer software applications which enable Skype users to communicate with other Skype users, and enabling, optionally and where possible, certain forms of communication with the subscribers of electronic communications networks and services.

Please find hereby Skype's brief response to the European Regulators Group consultation.

#### 1. General remarks

Skype welcomes some of the specific proposals formulated by the ERG's High Level Policy Task Force on VoIP (we note and appreciate progressive proposals especially relating to numbering and number portability), but we disagree strongly with major assumptions and statements made in this consultation document, which, if maintained and endorsed by the ERG, could lead to unnecessary and inappropriate regulation being imposed which would entail a serious risk of stifling much-needed innovation.

Our main comments, and -unfortunately- criticisms, are included in this introductory section, followed by short topical responses on selected tentative conclusions put forward by the Task Force.

In Chapter 1 - Introduction, the ERG's High Level Policy Task Force on VoIP affirms the following:

Page 5: "VoIP itself is part of this migration as it emerges from an additional service or niche product to a real substitute of traditional telephony. This will lead to a complete replacement of the traditional telephony service by VoIP in the long run."

Page 6: "In the following of the present report the term Telephony Service refers in general to all services which allow the users to establish a call session for a real-time bidirectional voice communication (that may be combined with video and data) based on either circuit switched or packet switched technology, without any reference to the regulatory classification. Furthermore, this report makes no specific differentiation between two distinct VoIP categories, that is Voice over Broadband (VoB) and Voice over Internet (VoI). Providers that offer VoB provide a VoIP service with a broadband service over their own network. VoI providers, on the other hand, offer a VoIP service only; the consumer has a broadband service from another supplier."

This approach amounts to qualifying seemingly all implementations of VoIP technology as a "Telephony Service" – in direct contrast with the European Commission Information and Consultation Document on the Treatment of Voice over Internet Protocol under the EU Regulatory Framework of 14 June 2004, which recognized that VoIP is a technology



which can be implemented in a variety of ways. The approach put forward by the Task Force incorrectly considers all implementations of VoIP technology as a direct substitute/replacement of the traditional circuit switched publicly available telephone service. This approach ignores the wide diversity of implementations of VoIP technology, and neglects the numerous innovative offerings that are emerging. No evidence or justification is put forward for taking this approach. Evidence to the contrary is overwhelming<sup>1</sup>.

Skype agrees that Voice over Broadband (VoB) is, in essentially all cases, provided as a direct substitute/replacement of the traditional circuit switched publicly available telephone service, by incumbent and alternative telecommunications companies. The substitutability of VoB for PSTN has been recognized by many NRAs when conducting the analyses of the relevant markets.

However, as regards Voice over Internet (VoI), Skype observes exactly the opposite trend to what is suggested by the ERG's High Level Policy Task Force on VoIP. Indeed, hardly a day goes by without the appearance of new products, applications and services on the Internet<sup>2</sup> that involve uni-directional or bi-directional, non real-time or real-time, speech communication, many of which do not at all resemble the traditional circuit switched publicly available telephone service.

Skype is convinced that, to a large extent already today, and fully in the very near future, most EU citizens at home and at work use and will use multiple distinct speech-enabled applications, fixed and mobile, multiple times per day (e.g. voice and video applications, voice modules in mainstream websites, social networking sites, games, virtual worlds, etc., voice modules in office software applications enabling document and work-related collaboration, voice modules in CRM and ERP packages, etc.) in addition to these same EU citizens' usage of more traditional fixed and mobile "Telephony Services". Skype is also convinced that users do not perceive Skype, and do not perceive the speech-enabled applications listed above, as a regular "Telephony Service", and do not expect to communicate with emergency services using Skype or other such applications or using web pages that are speech-enabled.

It appears that the Task Force is proposing to take traditional publicly available telephone services as a reference, and is proposing to regulate VoI with a backward-looking perspective, without due regard for the objective technical characteristics, objective usage cases, and objective user behaviour (which is assumed by the Task Force to be substitutive, whilst clearly it is not). Reasons for taking such an approach are not mentioned in the consultation document; they appear to be taken as a given.

Inappropriately regulating VoI, as is being proposed by the ERG's High Level Policy Task Force on VoIP, notably with regard to the provision of communications with emergency services, will dramatically stifle innovation, will prevent market entry, and will fragment the market along national lines rather than support the emergence of

See for example: http://momb.socio-kybernetics.net/



See annex for numerous examples of PSTN-interconnected VoI applications, which have little or nothing in common with traditional "Telephony Services" (VON Coalition examples).

genuine cross-border, pan-EU, or global VoIP-based offerings, to the detriment of European consumers and businesses.

We invite the ERG to re-visit and re-assess the basic philosophy and proposals of the Task Force, specifically with a view to recognizing the diversity of innovative VoI implementations, many of which are not a service at all, or not an electronic communications service, and which have functionalities that are drastically different from the traditional circuit switched publicly available telephone service. These innovative offerings would be prevented from emerging or from further developing if they were made subject to a set of regulatory obligations akin to the regulation of traditional circuit-switched publicly available telephone services. The effect of the Task Force's proposals, if allowed to come to fruition, would be to force all VoI implementations into adopting business models akin to those of traditional telecommunications companies. There would no longer be economic benefit in creating business, service or technological innovation.

In Chapter 2 - Harmonization, the ERG's High Level Policy Task Force on VoIP makes the following statements:

Page 7: "To spot these opportunities it is worth considering the reasons why NRAs have taken different approaches. The principle drivers of different regulatory approaches appear to be: [...]  $\sqrt{VoIP}$  take-up (and thus whether intervention is justified on an admin priority or net-benefits basis). [...]"

Skype notes that no cost-benefit analysis has been put forward by the ERG's High Level Policy Task Force on VoIP, whilst the proposals clearly amount to creating a heavy regulatory burden on VoI, notably as regards the provision of communications with emergency services (is the Task Force seriously proposing that emergency calls should be available from most websites?). Are we to conclude that increasing the burden (on providers of VoI solutions and in fact also on NRAs themselves) is justified on an administrative priority basis? Against which other priorities is this assessed? Skype believes that far greater priority should be accorded to: (a) promotion of competition in the provision of electronic communications networks and services at all levels, i.e. fixed and mobile, ranging from access networks, over backhaul and backbone networks, and including the components that constitute the Internet, and (b) vigorous defence of the ability for citizens, businesses and administrations to enjoy unrestricted functional access to content and software applications on the Internet.

Page 8: "But with the further development, harmonized approaches are gaining importance and are necessary to ease the implementation of pan-European strategies and cross-border investment."

Skype notes that the wording used by the Task Force is "pan-European strategies and cross-border investment", which is clearly very different from striving to achieve a single market for genuinely pan-European VoI or other pan-European VoIP-based offerings. The Task Force appears to regard the EU market as a patchwork of 27 national markets, based on nationally deployed networks. In this narrow view, there is no place for truly pan-EU services which reside at the application layer and which are network and country agnostic.



Internet-based pan-EU services and applications provided independently of the underlying networks have no practical or demonstrable need to be regulated simultaneously by 27 Member States. The home state NRA, using the same regulatory framework as the other 26 NRAs, is already able to ensure that consumer protection and other public policy goals are achieved. The attention of 26 replicative regimes serves simply to increase costs, complexity and administrative burden on smaller providers of communications applications and VoI services.

The e-Commerce Directive (2000/31/EC) and the Television Without Frontiers Directive (1997/36/EC) (the principles of which will soon be confirmed by the Audiovisual Media Services Directive) show that a "country of origin" principle for the law applicable to pan-EU electronic services has driven the development and uptake of such services and led to the creation of genuine single markets in the provision of e-commerce and media services. There is no reason why regional or global network-independent applications and services with a communications component should be any different

We therefore question whether the Task Force's proposals would promote pan-European supply. In fact the proposals amount to promoting a system in which genuine pan-European or global offerings would be subject to stringent (but perhaps superficially similar) regulation on a country-by-country basis, notably with regard to emergency services and telecom-specific consumer protection, which is likely to result in suppressing, rather than promoting, supply of genuinely pan-European VoIP-based offerings. We note that this narrow view of the EU market for communications services appears to be at odds with that of Commissioner Reding<sup>3</sup>.

On the basis of what is set out above, Skype recommends the ERG to re-consider the proposals of the Task Force, and to refrain from amalgamating all VoIP into a wideranging "Telephony Service" category, but instead to clearly distinguish supply and usage cases, and tailor the approach in accordance with these supply and usage cases.

An objective assessment would logically lead to imposing the set of proposed obligations only on VoB (which typically already provides both incoming and outgoing calls and emergency calling) but not on VoI, which is wonderfully diverse and is characterised by substantial innovation in terms of the user experience. Specifically as regards emergency calling, we question whether it is suitable and even realistic to seek to impose obligations on VoI. We elaborate on this further in sections 2 and 3 of this response.

## 2. Communications with emergency services

Skype wishes to express its serious concerns about any proposals that may subsequently be erroneously interpreted as legitimizing requirements on Skype and equivalents to enable communications with emergency services.

SPEECH/07/624, 11.10.07, Athens, "Better Regulation for a Single Market in Telecoms"



Skype has, for objectively compelling reasons, refrained from enabling communications with emergency services, as is detailed below.

Mandating emergency calling whilst ignoring objective technical characteristics and diversity of supply and usage cases (VoI is becoming more distinct—not less distinct—from traditional circuit switched publicly available telephone services) entails a severe risk of reducing, rather than enhancing, effective emergency response for the EU population and for travellers in the EU.

Skype is a peer-to-peer software application residing on users' computers and relying directly and exclusively on the Internet. Failure of users' computers (at the level of hardware, software, including malware), failure or degradation of users' Internet connection, failure of underlying network, failure of electricity supply, etc. are totally beyond Skype's control. Skype cannot guarantee communications with emergency response centres, because failures or degradations (including temporary congestion on ISPs networks or on Internet backbones, including glitches in the peer-to-peer cloud beyond our control – e.g. the 48 hour Skype outage that occurred in August 2007 as a result of the widespread reboot of Windows OS machines following a Microsoft update) can and do occur in the real world. Furthermore, Skype IDs, SkypeOut credits and SkypeIn numbers are sometimes shared by multiple people (families, groups of friends, project teams in a professional context, etc.) located around the world.

Skype considers that it would be irresponsible to enable (or claim to provide) access to emergency services, because such access would inevitably be intermittent, and would inevitably result in requests being addressed to the wrong emergency response centre (domestic or international), in the wrong language etc. due to Skype's truly global nature and widespread nomadic usage, which could yield unacceptable delays in the provision of effective assistance.

In today's circumstances, and for the foreseeable future, Skype believes that it would be most unwise for regulatory authorities to mandate the provision of access to emergency services on entities that are not technically able to provide a high expectation of flawless initiation/routing/completion of a communication with emergency response centres. Giving users a false sense of security, whilst knowing that some requests for assistance will inevitably not reach the expected destination would, in Skype's opinion, be far worse than the current situation.

Rather than the proposed blanket imposition of emergency calling, for which a spurious legal basis is put forward on Page 11 of the consultation document, the ERG should allow Skype, similar software application providers, and web-based speech-enabled applications, to continue to fully inform users and prevent any expectation that they enable emergency communications. Inappropriately mandating emergency calling would create dangerously unrealistic user expectations.

Skype also questions whether NRAs would be able to enforce the provision of emergency calling on the myriad of one-way outgoing call solutions that are provided from around the world using a variety of Internet-based platforms, including the Web itself.



If the ERG or NRAs were to create widespread user perception that any and all speech communication mechanisms that enable a user to reach the PSTN will provide emergency calling, but in practice this turns out not to be the case, then the ERG and NRAs would bear a heavy responsibility of having created unrealistic expectations and confusion among European citizens and travellers in the EU.

Conversely, if the ERG and NRAs succeeded in enforcing emergency calling on any and all solutions that can be provided and are being provided from around the world, this would likely have the effect that providers would avoid locating in the EU, and extraterritorial providers would function in breach of the EU rules, or would seek to block access from the EU, i.e. innovation would be restrained, and/or innovation would occur to the exclusion of the EU.

# 3. Location information and QoS for emergency communications

Skype has refrained from enabling emergency communications, because Skype cannot guarantee the successful initiation and completion of such communications with the emergency response services, cannot unequivocally identify users (because some Skype accounts and Skype credits are shared by families and workgroups at physically different locations), nor can we reliably ascertain the location of Skype users (for the same reason). Users are very explicitly alerted to the fact that they cannot reach emergency response services using Skype, and we are convinced that the characteristics of the Skype product are such that no user confuses Skype with a PSTN service. Indeed, contrary to what regulators may want to believe, Skype has not become aware of any substantive complaints from users in this regard.

Skype participates in various industry and government fora (in particular in the IETF and EGEA) to develop future emergency communications solutions that are IP-based and flexible enough to work across national boundaries.

The solutions being envisaged are not readily available at this time, and it remains to be seen, once the work is finalised, what the implementation timeframe will be, what the level of accuracy will be, and whether Skype can evolve its peer-to-peer software to provide accurate user identification and location information.

As regards QoS, we simply wish to emphasise that Skype does not have a network, and Skype does not have agreements with any of the world's Internet or broadband access providers. Skype software clients autonomously create a peer-to-peer cloud on the Internet. Skype has no capability of ensuring QoS or "call prioritization".

On the basis of what is stated in sections 2 and 3, we urge the ERG to reconsider the Task Force proposals with regard to mandatory emergency calling for any Vol. The Task Force is erroneously amalgamating all VoIP into a "Telephony Service" category and should instead clearly distinguish supply and usage cases, and tailor the approach in accordance with these supply and usage cases.



### 4. Numbering

Skype welcomes the confirmation by the ERG that numbering plans must be technology neutral, and that the utilization of geographic numbers (from a single numbering pool), including on a nomadic basis, is essential to deliver benefits of VoIP technology to EU citizens, businesses and administrations.

We are, however, surprised to read in Section 4.4, point 1 of the consultation document that the Task Force recommends this neutrality to be only for the benefit of "All providers of fixed Telephony Services..." In Skype's opinion, this, in itself, is an unnecessary and detrimental restriction on the legitimate utilization of geographic numbers by any providers of products/services/applications with voice or non-voice components, which has not been justified by the Task Force, and which is in breach of the relevant EU Directive.

As regards the interpretation of Article 10 of Directive 2002/21/EC, and the related Task Force recommendation contained in the consultation document, please allow us to provide a reminder of the guidance provided by the European Commission in the Information and Consultation Document of 14 June 2004 on the treatment of Voice over Internet Protocol under the EU Regulatory Framework, which specifically confirms in Section 7.1 that:

"Any undertaking providing or using electronic communication networks or services has the right to use numbers". [...]

Skype is a strong proponent of the application of this principle, and requests that it be more explicitly enshrined through formal guidance (from the ERG and from the European Commission) in the short term, and in a revised Framework Directive.

Indeed, Skype believes that experience in the past several years (of a much wider community of interests than the Skype user community) demonstrates unequivocally that there is not only latent, but quite manifest, demand from end-users (individual citizens, small businesses, large businesses, and governmental authorities at all levels) for:

- allocation of all types of numbers to any persons or entities, including those that are not providers of 'fixed Telephony services' (as expressed by the Task Force) or entities that are not providers electronic communications networks or services; and
- o allocation of numbers, including geographic numbers, outside of the traditional telephone zones or other boundaries, including on a trans-national basis.

Skype believes that the ERG should adopt principles to reflect this demand, and that the European Commission should include in its forthcoming proposals for amending the Directives, revised policies designed to strengthen the EU internal market with regard to the right of EU citizens, companies and governments to make use of national numbers across the European Union.



Failure to reform the numbering arrangements would undoubtedly harm citizen-consumer and business interests in the EU, especially in an environment where numbers from certain non-European jurisdictions are, de jure or de facto, available world-wide.

## 5. Number portability

Skype has always favoured unrestricted number portability, without limitations on the 'direction' of portability or use of the numbers. We support the Task Force's proposal to ensure that NRAs take all necessary steps to achieve unrestricted number portability, in all directions.

# 6. Interpretation ECS, PATS and PTN definitions

Skype notes that the Task Force is, in the section discussing the definitions, but also elsewhere in the consultation document, openly proposing that NRAs would cast aside the applicable EU legal framework and its (often imperfect) implementation into national law. Indeed, the overall proposal is to essentially apply all PATS obligations to all implementations of VoIP technology, irrespective of the modalities of self-provision or supply, the involved hardware, software, information society service, electronic communications service, or publicly available telephone service, and irrespective of the objective usage cases, or the European end-users' interests.

The most extreme illustration of this is found on Page 28 of the document, in the statement: "Where national law does not permit explicit misapplication, it can be achieved in practice ... [...]." This 'message to NRAs', which is expressed as "maximum creativity" elsewhere in the document, is endemic throughout the section and in fact throughout the proposed position. Clearly, intentional misapplication of the Directives, especially where (as explained above) it runs counter to achieving a genuine single market, is not a position that the ERG, given its mandate and responsibilities, can credibly endorse at its meeting in December 2007 where it is scheduled to discuss and possibly adopt the proposed Common Position on VoIP.

We also question whether the ERG's mandate includes radical re-interpretation of some of the core tenets of the Framework Directive and Universal Service and Users' Rights Directive as agreed by Council and European Parliament in 2002. If such changes were needed, the appropriate route would be for the European Commission to propose them and for the Council and European Parliament to adopt them. The ERG has no formal role in the legislative process. The effect of the proposals of the Task Force, whether intentional or not, is to undermine the ongoing in-depth review of the Directives.



#### 7. Conclusion

Skype welcomes some of the specific proposals formulated by the ERG's High Level Policy Task Force on VoIP, but we question whether other proposals, notably with regard to emergency services, would be compliant with EU Directives and would further the achievement of the goals stated in the EU Treaty, the EU Directives, the Decision establishing the ERG, and in every NRA's mandate under national law.

#### Skype invites the ERG to:

- 1. Re-assess the overall philosophy and purpose of the document.
- 2. Study and review the development and use of Internet-based speech-enabled applications on a current and forward-looking basis, i.e. not using the reference framework of traditional circuit switched publicly available telephone services, but taking into account the Internet-based applications that exist now and are emerging on a quasi daily basis.
- 3. Clearly separate Voice over Broadband (VoB) from Voice over Internet (VoI), which represent completely different technical provision and user experience models (and are not mutually exclusive but are complementary).
- 4. Introduce additional policy objectives, focused on delivering a more positive and user-friendly approach to VoIP, with a focus on contributing to EU citizens' welfare rather than 'administrative priorities' (as expressed in the document). Quality increases (rather than decreases), presence awareness, chat, video, file transfer, high privacy protection and overall commodity should feature as worthy elements, including in the context of forward-looking communications with emergency services through alternative channels.
- 5. Take measures to support the development and adoption of VoIP, such as supporting the provision of naked DSL, ensuring network neutrality on fixed and mobile networks, facilitating the ability for consumers to switch to different Internet Service Providers, and e-mail portability.
- 6. Take account of imminent developments at EU level, notably the expected revision of Article 20 of EU Directive 2002/22/EC, and resist pre-empting the European Commission's proposals in the context of the review of the regulatory framework and the subsequent legislative process in Council and in the European Parliament.
- 7. Consider attending IETF and EGEA workshops in order to better familiarise itself with the timing and technological specificities in the field of next generation 112 provision.



Skype would appreciate the opportunity to meet with the ERG to explain in more depth the nature of the emerging technologies, applications and services in the Internet communications space. In the meantime, should you require any additional information with regard to the contents of this response, please do not hesitate to contact us.

Yours faithfully,

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## INNOVATIVE (AND OFTEN FREE) PSTN CONNECTED VOIP SERVICES

Transforming the way people communicate

## Geber Baby Foods -- A 24/7 lifeline for new mothers:

The Gerber baby food web site includes an innovative help line for new mothers. If a new mother has an urgent question at 3am about feeding their new born or warming a bottle, they can today click on the web site using a click-to-dial one-way VoIP service that immediately connects the parent to an infant care specialist 24/7. Its one of many new and exciting click to dial services. (see: <a href="https://www.gerber.com/contactus">https://www.gerber.com/contactus</a>)





## Call Notify - a powerful new tool for people with disabilities:

This VoIP based application allows a person with a speaking or hearing disability to type text and have it delivered as a computerized voice message to someone's telephone. The application is a one-way VoIP service that uses a text to speech synthesizer to generate a voice message and call the designated number. (see: http://wiki.cdyne.com/index.php/Phone Notify )



# Giving voice to online games - and new ways to communicate:

VoIP gives voice to online games and virtual worlds. One technology popular in the online world Second Life allows elected officials and others using a standard phone line to call into the virtual world to address virtual gatherings. The VoIP technology allows greater collaboration and conversation. VoIP technology by Vivox can also be used to allow people to talk using their computer or standard phone. (see: <a href="http://www.vivox.com/">http://www.vivox.com/</a>) At right is right: Congressman George Miller on the first day of the 110<sup>th</sup> Congress addressing Second Life.



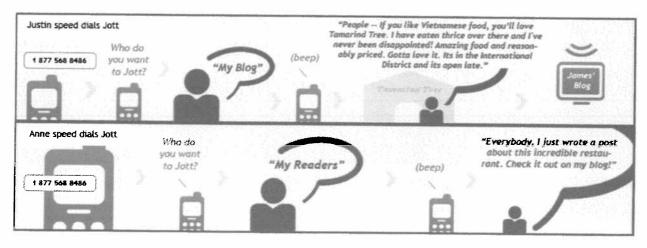
## TVCallMe - converging voice and TV in new ways. Zodiac's TVLocalSearch integrates TV with VoIP and allows a user to click on the TVCalIME button on their remote to speak to the local business. Zodiac's TVCallME service calls the viewer first and then the business, instantly

connecting them through VoIP technology. (see: <a href="http://zodiac.tv/">http://zodiac.tv/</a>)

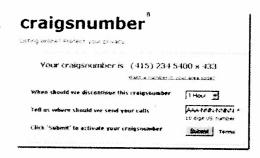


#### Blogging by phone - or leaving a text message for a deaf person

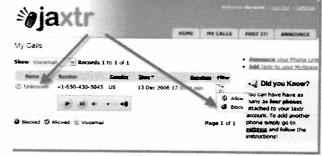
Jott allows you to dial a number, leave yourself a voice message, and you get a transcribed note in your inbox for later reference. It can also be used as a remote blogging tool or to communicate remotely with the deaf who may not be able to hear a voice message but can read it when it's converted to text. (see: http://iott.com/)



Allowing users to connect by phone without giving out their personal phone numbers. A variety of innovative services allow users to talk without sharing your real number! Craigsnumber provides consumers with a way to sell services online using a temporary, auto-expiring phone number that can forward to the number of your choice in order to protect privacy and user anonymity. The service provides users with a free temporary phone number that will forward to a number of your choice for an hour, a day, a week or a month before expiring. (see: http://craigsnumber.com/)



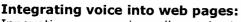
**Adding voice to social networks and blogs.** Jaxtr is designed to bring voice to social networks and blogs thru a free service that lets users link their phones with their online network to hear from callers worldwide while keeping their existing phone numbers private. (See: <a href="https://www.jaxtr.com">www.jaxtr.com</a>)



**Taking your online community to your phone.** Jangl lets you take your online community to your phone. Jangl allows people communicate, without exchanging telephone numbers. Jangle has teamed

with online dating site Match.com to provide user anonymity called matchTalk. The computer-based VoIP technology allows each person to call in to a central conference call of sorts. The matchTalk system assigns the couple with a unique number which they can use to talk to each other without fear of giving away their real phone number. (see: http://www.jangl.com/)



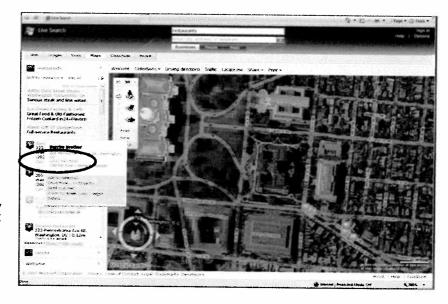


Innovative new services allow voice to be integrated directly into web sites. Some of the most exciting applications including online mapping and yellow page services that allow web surfers to find and communicate with local businesses. (see: <a href="https://www.live.com">www.live.com</a>)

## **Humanizing the Internet.**

New VoIP services allow phone connectivity to be embedded into an HTML hyperlink in any email, web page, word document, or any other document which accepts an HTML hyperlink. (see: www.click4me.net, www.estara.com)





For more information about VoIP and its potential: Click here to call the VON Coalition or paste this url into your browser: http://www.click4me.net/autodial.aspx?username=jkohlenberger , then type in your phone number and you'll be connected.