



From: The Internet Society of South Africa

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Sunday, October 17, 2004

To: ICASA

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**Response to ICASA question document on ministerial
determinations of 3 September 2004. Government
Gazette 26763, notice 1924 of 2004**

Introduction

The Internet Society of South Africa (ISOC-ZA) thanks the Independent Communications Authority of South Africa (ICASA) for the opportunity to make a written submission in regard to the Ministerial determinations of 3 September 2004 (Government Gazette 26763, notice 1924 of 2004). We request the opportunity to make an oral presentation, should hearings be held during the upcoming colloquium or elsewhere.

The ISOC-ZA is a civil society organisation that enables telecommunications users in South Africa to participate in public debate around policy and regulatory issues pertaining to the new economy. Our goal is to represent the interests of telecommunications users and consumers, particularly individuals, small businesses and academic institutions. During the past years the Internet Society has made submissions on a number of regulatory and legislative proposals, as well as providing an ongoing email-based discussion forum open to all interested parties (see www.isoc.org.za for further details).

A. About the Internet Society, South Africa chapter and branches

The Internet Society (ISOC) is an association with more than 150 local chapters and 16,000 individual members in over 180 countries. It provides leadership in addressing issues that confront the future of the Internet, and is the organisational home of the Internet Engineering Task Force, the Internet Architecture Board, the Internet Engineering Steering Group, and the Internet Research Task Force.

Since 1992, the Internet Society has served as the international organisation for global coordination and cooperation on the Internet, promoting and maintaining a broad spectrum of activities focused on the Internet's development, availability, and associated technologies.

ISOC-ZA is the South African chapter of ISOC. The founding members met for their first annual general meeting and elected the founding office bearers on Tuesday, 28 October 1997. ISOC-ZA members are also members of ISOC. It is a non-profit organisation, and does not speak for industry or any other vested interests. ISOC-ZA is active in areas such as telecommunications, governance, and intellectual property.

Context

The ISOC-ZA recognises the strategic importance of telecommunications for South Africa, not only as an important industrial sector but also as a key enabler for growth and job creation in other sectors. We recognise particularly the importance of widespread, cheap telecommunications to the growth of small, medium and micro enterprises (SMMEs), to job creation, to the provision and use of electronic government services and to the growth of electronic commerce.

We note the apartheid legacy of inequitable development that has left many South Africans, especially rural dwellers, with no or inadequate access to

telecommunications services. We acknowledge that ending this social and economic marginalisation is a key policy imperative, which we support.

We believe that the goal of broadening access will be best served by a regulatory and policy regime that encourages competition and that promotes, rather than hinders, private investment in this sector.

Format of this submission

This submission concentrates firstly on general comments about the ICASA question document as a whole, before proceeding to specific comments on individual sections or questions. For ease of reference the second section is presented question by question with responses to each.

General comments on the Ministers determinations

We note that the object of the Ministers determinations is chiefly “to enable and facilitate competitive telecommunications services in the public interest”. This is a goal we wholeheartedly support. Competitive services will result in decreased costs and offer a multitude of benefits to small businesses and consumers including, amongst others:

- Access to low cost telecommunications;
- Access to a global marketplace for goods and services;
- Unparalleled speed and efficiency of transactions;
- Lower transaction costs; and
- The ability to seek out the best quality goods and services at the lowest cost, regardless of the location of the supplier;

Existing law, especially with regard to the constraints on the number and size of service providers, has now in many respects become outdated and may frustrate the realisation of these benefits.

As an example, we illustrate how many South African businesses, serving South African customers, utilise Internet hosting services abroad because of the lower direct costs. The effect of this is that data is hauled to/from the USA/Europe, costing indirectly, but wasting hard-earned South African bandwidth resources. This example illustrates the economic forces in play and the implications of not allowing market based competition.

ISOC-ZA continues to support and encourage the move toward new converged telecommunications legislation as discussed in the Department of Communications Convergence Bill and Colloquium.

The Ministers determination removes certain barriers and updates existing legislation to ensure increased competition and improved technology neutrality.

We believe it is a significant improvement to the previous legislation and that it shall achieve its aims.

General comments on the question document

The publication of the questions first came to our attention on Thursday 15 October. This allowed respondents two working days to establish and submit a formulated response. Although the timing is inadequate to allow for broad based consultation on the specific questions, previous workshops show that ISOC-ZA supports the liberalisation process.

The role of regulations and a strong regulatory authority is seen as valuable for the purpose of ensuring fair competition. Where the regulator is used for ensuring the opposite – where monopoly prevails - concerns are raised.

ISOC-ZA believes that in general, we should be vigilant about the dangers of over-regulation. Just as we do not seek to regulate the flow of paper through an office, so we should not seek to regulate telecommunications except to the extent that such regulation is required to create an enabling environment and to remove restrictions.

Considering these principles we consider each of the questions as follows:

Specific responses to questions

A. Ministerial Determination 1: Self-provision and Greater Choice for Mobile Operators

Mobile cellular telecommunication service (MCTS) licensees may utilise any fixed lines which may be required for the provision of the service, including fixed lines made available by Telkom or any other person providing a public switched telecommunications service.

Q1: Is “self-provisioning” of facilities for MCTS operators authorized and can the fixed lines in question be provided by any person, other than a licensee in terms of the Act?

A1: ISOC-ZA: The nature of this language appears congruent with the definition of infrastructure in the convergence model. ICASA may consider this as transition from the PSTN/MCTS vertical model of telecommunications licensing to the layered convergence model where both may be considered infrastructure and/or service providers.

Q2: Other than frequency spectrum licences being required where fixed lines are provided by means of radio links, are there any other regulatory measures that need to be implemented to give effect to this determination?

A2: ISOC-ZA: No. The ISOC-ZA believes this determination must be put into effect as soon as possible.

Q3: How should current free bands be managed (e.g. the ISM bands)? Should free use apply subject to efficient coordination or should more specific licensing apply?

A3: ISOC-ZA: "Free use should apply subject to efficient coordination. We suggest that ICASA consider inviting those service-providers interested in using the ISM-bands to co-operate in creating a code-of-conduct and best-practice documentation for operating in these bands, including perhaps, local plans for use of channels.

Q4: What implications, if any, exist for further unbundling of the local loop?

A4: ISOC-ZA: Wholesale interconnect and fair access to local exchange fabric needs to be established.

Q5: What measures/provisions are required to ensure operator and consumer interests with regard to telecommunication rights of way?

A5: ISOC-ZA: We do not envisage that this need be established in advance and that it be handled at the local government level where rights of way are practically dealt with. Transparency in the industry must yield best outcomes for consumers. As with universal service we believe the market will be the best regulator of consumer interests in the short term – provided that there is sufficient competition to enforce better standards.

Q6: What is the scope of the telecommunication facilities (fixed lines), which may be used by these operators? Does it include VSAT fixed links?

A6: ISOC-ZA: Yes. We understand the wording of fixed line to be technology neutral.

Q7: Does this Determination apply to any other industry players other than MCTS operators?

A7: ISOC-ZA: Not in our understanding, as of yet. We do encourage that more industry players are introduced in the coming year/s.

B. Ministerial Determination 2: Provision of Public Pay Phones

In terms of section 39 (3) of the Act, 1 February 2005 shall be the date from when persons may apply for a licence to provide public pay phone services in any area of the Republic.

There are currently four models of Public Payphones in operation in South Africa, namely:

- Fixed public pay-telephones

- Community Service Telephones,
- Cellular public pay-telephones, and
- “Commercial” Cellular public pay-telephones

Q1: How should the definition of a public pay-phone service be revised in light of this Determination?

A1: ISOC-ZA: The ISOC-ZA believes this should remain a narrow definition where a public pay phone service is that which incorporates a physical telecommunications product.

Q2: What factors should be considered in licensing public pay-phone operators?

A2: ISOC-ZA: As few factors as possible. At most, company registration and contact information only.

Q3: How would further unbundling of the local loop affect this Determination?

A3: ISOC-ZA: Our interpretation of convergence implies that Public Payphones are to be deemed as **applications** and the local loop as **infrastructure**. As such we do not identify any effect on this specific determination.

Q4: Does the Determination apply to other forms of delivery of public pay-phone services, for example, Internet cafes?

A4: ISOC-ZA: No. We feel that such an interpretation will hamper growth and development of Internet access, especially in under serviced areas.

Q5: Should VANS be allowed to provide public pay telephone services from 1 February 2005?

A5: ISOC-ZA: Yes. The Internet Society believes that competition in applications should be as broad as possible. We believe that infrastructure providers (PSTN/MCTS licensees) should not be allowed to provide public pay telephone services in order to level the playing fields, drive competition and further development and empowerment.

C. Ministerial Determination 3: Provision of Voice by Value Added Service Providers

In terms of section 40(3) of the Act, 1 February 2005 shall be the date from when VANS may carry voice using any protocol.

Q1: What other protocols can be used/ are available?

A1: ISOC-ZA: The Internet Society is the organisational home of the Internet Engineering Task Force (IETF), the Internet Architecture Board (IAB), the

Internet Engineering Steering Group (IESG), and the Internet Research Task Force - the standards setting and research arms of the Internet community. These organizations operate in an environment of bottom-up consensus building made possible through the participation of thousands of people from throughout the world.

We support all of the standards and protocols as agreed in these global bodies and believe that they all contribute toward social and economic development. We would also support use of other protocols developed in a similar open and co-operative fashion, and which are not encumbered by intellectual property issues which impede implementation. In order to be technology neutral one need not artificially regulate globally agreed or globally regulated protocols.

We invite you to browse the information published by the standards settings bodies, each of which has some discussion on voice protocols – the websites referred to on our global website at: <http://www.isoc.org/standards/orgs.shtml>.

Q2: What implications flow from this Determination for numbering policy and the numbering plan?

A2: ISOC-ZA: We support the principle of revamping numbering policy, with provision for VOIP as well as with a special interest in number portability. As has been previously discussed and proven, number portability will lead to improved pricing for consumers. Although we support this process, it is not a prerequisite for VOIP services to initiate operations. In the short term, ICASA may consider defining a VOIP-prefix, in the style of the 056 prefix defined in the UK by OFCOM.

Q3: Does any voice need to be regulated? Does ICASA need to distinguish between corporate and commercial VoIP providers or between different types of VoIP providers?

A3: ISOC-ZA: No. We believe this would lead to unmanageable complexity and further bureaucracy. We note in passing that the FCC in the USA has decided that services that are VoIP end-to-end and do not connect to the PSTN are not even telecommunications services at all, but rather unregulated information services. See <http://pulver.com/reports/pulver-decision.pdf>.

Q4: Is it envisaged that there will be voice over any protocol providers who will lease facilities from network providers? Will these network providers include all other operators?

A4: ISOC-ZA: Yes we envisage that each of these potential scenarios will occur.

Q5: Should VoIP service providers be licensed and if so, which category of VoIP provider should be licensed?

A5: ISOC-ZA: No. Only PSTN operators should NOT be allowed to provide VoIP services. Prices should be regulated for Internet - PSTN interconnect in a similar

principle (and for similar purposes) as the regulation of interconnection between MCTSs and PSTNs.

Q6: What regulatory steps need to be taken to ensure that section 40 of the Act enables the implementation of this Determination?

A6: ISOC-ZA: We believe that pricing should be agreed for VoIP-PSTN/MCTS interconnects. Allow open competition for VoIP services as these are viewed as applications in the convergence model. Competition in the provision of these services will generate jobs and economic development.

Q7: What are the key interconnection issues for VoIP?

A7: ISOC-ZA: Pricing. We believe VoIP service providers should be governed under the same interconnect pricing regime as mobile network providers.

Q8: What implications flow from this Determination for the provisions of the Regulation of Interception of Communications and Provision of Communication Related Information Act, No. 70 of 2002, for VANS operators who offer voice services?

A8: ISOC-ZA: The Internet Society views interception as a network (infrastructure or services) issue whereas VoIP is an application. As such we do not believe implications flow and that the two issues are separate and distinct.

Q9: What universal service obligations should be contemplated?

A9: ISOC-ZA: We believe that free market competition will result in increased universal service due to the significant cost reductions. We can see similar indications from the success of mobile in under serviced areas. We believe that further competition in VoIP will result in further improvements in service delivery to under serviced areas.

Q10: How should ICASA approach the regulation of Quality of Service (QOS)?

A10: ISOC-ZA: We do not believe that ICASA should make any direct regulations with regard to QOS. A competitive market will certainly ensure that services offering an unacceptable QOS for their price will not succeed. We note that no such regulations have been made in respect of mobile communications. However, we believe that until effective competition exists from PSTN providers, ICASA should regulate bandwidth tariffs for sale to VoIP services in order to enable delivery of a good quality of service at an acceptable price.

Q11: Can emergency services be offered by VANS providers allowing voice services?

A11: ISOC-ZA: Yes. It is our understanding that emergency services are considered content in the converged model. This reflects that emergency services – similar to all other content – may be delivered through various applications such as VoIP. As such we believe, that VoIP service providers

should have an obligation to provide emergency services channels, but not content.

D. Ministerial Determination 4(a): Choice of the Provision of Value Added Network Services

In terms of section 40(2) of the Act, 1 February 2005 shall be the date from when Value Added Network Services may be provided by telecommunication facilities other than those provided by Telkom and the SNO or any of them.

Q1: What type of telecommunication facilities are contemplated here? i.e. VSAT, Wireless, radio, GMPACS and satellite capacity?

A1: ISOC-ZA: We believe that all facilities based on open standards – and not limited to the list above – are contemplated here. The policy (In terms of section 40(2) of the Act) is technology neutral and separate legislation is in force to regulate each specific technology including each of the above.

Q2: May VANS apply for frequency spectrum and if so, what frequency bands should VANS be allowed to utilise?

A2: ISOC-ZA: Yes. The ISOC-ZA believes that global standards should be recognised as per the regulation of licensed spectrum as well as unlicensed spectrum. We suggest that an improved competitive environment – established through broadening the base of service providers allowed to obtain licenses to use spectrum, together with decreasing the costs of licensing spectrum - will result in a vastly improved telecommunications economy. We note the great success of unlicensed spectrum and would encourage ICASA to allocate additional spectrum in this way.

Q3: May VANS now also obtain their telecommunication facilities from PTNs?

A3: ISOC-ZA: Yes. We believe this is also referred to and supported by the following section F: Ministerial Determination 5: Optimising the use of Private Telecommunications Network Facilities.

Q4: Are VANS compelled to still use an international telecommunication service or international gateway telecommunication service providers?

A4: ISOC-ZA: It is our understanding that VANS may use whichever service provider they wish and will be compelled to use that which offers the best economic deal.

E. Ministerial Determination 4(b): Cession of Telecommunications Services by Value Added Network Services

In terms of section 40(4) of the Act, 1 February 2005 shall be the date from when a person who provides VANS shall be entitled to cede or assign the right to use, or sublet or part with control or otherwise dispose of the telecommunications facilities used for the provision of value added network service.

Q1: Where cession, subletting etc occurs, who is the facilities provider for the purposes of monitoring and interception as well as for implementing licence obligations?

A1: ISOC-ZA: The provider of the infrastructure service as understood in the convergence model – for example the provider of the I.P. (Internet Protocol) service - is the facilities provider. Where this is ambiguous, the courts shall determine.

Q2: What are the major changes, if any, required to the current facilities leasing guidelines?

A2: ISOC-ZA: Interconnect policy is to be determined. Special focus should be made toward developing shared access at each of the international, national and local levels.

Q3: How should ICASA approach the risks and consequences of the potential for infrastructure duplication?

A3: ISOC-ZA: ISOC-ZA believes that by ensuring transparency both on how the industry should operate as well as how the industry is structured, and through the adoption of technology neutral open standards, ICASA will provide the appropriate level of regulations required to manage risk of over duplication. Further, ISOC-ZA believes that additional infrastructure is needed to increase capacity in South Africa and the rest of the continent.

F. Ministerial Determination 5: Optimising the use of Private Telecommunications Network Facilities

In terms of section 41(5) of the Act, 1 February 2005 shall be the date from when a PTN Operator shall be entitled to resell spare capacity and facilities or to cede or assign his or her rights to use such facilities or to sublet or otherwise part with control thereof.

In light of the fact that PTNs are still required to obtain their facilities from PSTS operators, the following issues require consideration:

Q1: Should the definition of PTN in section 41(1) of the Act be amended and if so, how?

A1: ISOC-ZA: No. The convergence process should be prioritised.

Q2: Does this Determination change this provision where spare capacity can be used for other purposes?

A2: ISOC-ZA: No.

Q3: Does this add a commercial element to PTNs? And how should PTNs be held accountable where cession of rights occurs?

A3: ISOC-ZA: Yes, this may add a commercial element to the PTNs if they so wish. This may create new competition in the market. Precedent must be established to determine cases for more knowledge in the system.

Q4: How will the resale of spare capacity impact on the determination of license fees?

A4: ISOC-ZA: The current fees may be reduced if economies of scale can be realised by ICASA. Increased demand for PTN licenses – at the current fee - will result in improved revenues for ICASA.

Q5: What are the major regulatory barriers and what enabling mechanisms is the industry seeking from ICASA?

A5: ISOC-ZA: ISOC-ZA expects that the current PSTN license holders, as well as others, will hope to continue grandfathering of privileges that have gone beyond their due date. We believe that as an enabling mechanism, historic privileges should be removed and as a regulatory barrier those historic privileges that currently remain in place must be carefully regulated and more globally competitive tariffs sought after. As an example, a SOHO (small office home office) user in S. Korea pays less than R200 to obtain 50 times more (speed and quantity) of service that the same user pays >R800 in South Africa. I.e. South Africans are paying at least four times more to get 1/50th of what others in the world are receiving.

We also expect that current PSTN license holders may try to introduce unnecessary technical barriers for new providers. As examples: a requirement to interconnect using the SS7 protocol, or a requirement to interconnect at a large number of physical locations. We urge ICASA to resist such practice that will impede the introduction of competition.

Q6: What form of resell may be applied by a PTN from 1 February 2005? i.e. per minute usage or monthly rental?

A1: ISOC-ZA: Either of the two options presented, or as the market determines is most economically efficient.

Q7: Does this determination result in the PTN bypass prohibition provided for in section 41(7) of the Act becoming obsolete from 1 February 2005?

A7: ISOC-ZA: Yes.

G. Ministerial Determination Preparing our Youth for the Knowledge Economy

In terms of section 45(3) of the Act, 18 January 2005 shall be the date from when public schools and public further education and training institutions will be entitled to a 50% discount on (a) all telecommunications calls to an internet Service provider; (b) any connection or similar fees or charges levied by an Internet Service Provider

Q1: Is this discount applicable to retail and wholesale tariffs?

A1: ISOC-ZA: Yes. Since it does not specify, it applies to both or we cannot understand how the customer may benefit.

Q2: Does this discount also apply to PTNs who might be reselling spare capacity to the above-mentioned institutions?

A2: ISOC-ZA: Yes. As defined.

Q3: Does this Ministerial Determination make obsolete the provision in section 44(10) and (11) of the Act which envisages a single PTN for all public schools or public further education and training institutions?

A3: ISOC-ZA: Yes.

ISOC-ZA extends its appreciation of your attention.

Sincerely,

Internet Society of South Africa

Paul Esselaar – Public Voice,

Alan Levin – Chairman,

Stephen Davies – Member