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## Independent Communications Authority of South Africa

## General Notices

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## GENERAL NOTICES

## **NOTICE 1412 OF 2001**



## INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA HEREBY, IN TERMS OF SECTION 27 OF THE TELECOMMUNICATIONS ACT OF 1996 ("THE ACT"), GIVES NOTICE TO THE PUBLIC OF ITS INTENTION TO HOLD AN ENQUIRY ON THE PROPOSED TERMS & CONDITIONS OF A VALUE ADDED NETWORK SERVICE LICENCE.

Interested persons are hereby invited to submit written representations in relation to this enquiry to the Authority by no later than 13h00 on Friday, 29<sup>th</sup> of June 2001 by post, hand delivery or facsimile transmission. Where available a softcopy of the corresponding hardcopy of the representation should be e-mailed to matta@icasa.org.za.

The written representations must be addressed to **Mr Andries Matthysen**, Acting HOD: Telecommunication Licensing, Independent Communications Authority of South Africa, Private Bag X1, Marlboro, 2063, or Block A, Pin Mill Farm, 164 Katherine Street, Sandton, Facsimile (011) 321-8550, Tel 011 321-8377 or Cell 083 326 3543.

Persons making written representations must clearly indicate in their representations if they wish to make oral representations including the duration thereof which shall not exceed one (1) hour. Should a request for such oral hearings be received then public hearings shall be held on the 11<sup>th</sup> of July 2001 at 09h30 at Block B, Pin Mill Farm, 164 Katherine Street, Sandton, Gauteng.

MANDLA LANGA CHAIRPERSON ICASA

## Proposed VANS Licence

#### INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

#### LICENCE FOR THE PROVISION OF VALUE ADDED NETWORK SERVICES

In terms of the provisions of section 40 of the Telecommunications Act (Act 103 of 1996) and the applicable regulations

## "VANS provider's name"

(hereafter called the Licensee), is hereby licensed to provide value added network services, subject to the following terms and conditions:

#### **DEFINITIONS AND INTERPRETATIONS**

 In this licence, unless otherwise stated, words and terms used shall have the same meaning as defined in the Telecommunications Act, (Act No. 103 of 1996, as amended) and any regulations derived therefrom.

"Act" means the Telecommunications Act, 1996 (Act No. 103 of 1996, as amended)

"Billing Process" means the billing systems and metering systems taken together, where "billing systems" means the totality of the equipment, data procedures and activities which the licensee uses to determine the charges to be made for service usage, and where the "metering system" means the equipment, data procedures and activities which the Licensee uses to determine the extent of any telecommunication services which it has provided.

"Consumer Price Index" means the index of consumer prices applicable to all economic sectors compiled and published by the Central Statistical Service.

"Customer" means any person who has indicated a willingness in writing with the Licensee to receive Value Added Network Services from the Licensee on the Licensee's terms and condition, or has in writing entered into, and is not in breach of a contract with the Licensee for the provision of such services.

#### RIGHTS AND OBLIGATIONS OF THE LICENSEE

## 2. Unless otherwise stated

(1) The Licensee shall be entitled, subject to the other provisions in this licence, to provide any or all value added network services.

- (2) This licence shall not be construed as granting any exclusive rights to the Licensee in the provision of value added network services.
- (3) The Licensee shall obtain all national and international telecommunication facilities used for the provision of value added network services from any person licensed to provide a public switched telecommunication service.
- (4) Only type approved equipment may be connected to the network of any person licensed to provide a public switched telecommunication service.
- (5) The Licensee may not convey voice telephony signals as part of any value added network service provided by it, until such time as may be determined pursuant to section 40(3) of the Act.

#### CUSTOMER CONFIDENTIALITY

- The Licensee shall not disclose any information about its customers, obtained in the course of
  providing the service, to third parties or use it for any purpose other than fulfilling its obligations to
  customers, unless required to do so pursuant to condition 4.
- 4. The Licensee may disclose information about customers to a third party to the extent that it is required:
  - (1) In the process of debt collection;
  - (2) By the Licensee's auditors for the purpose of auditing the licensee's accounts;
  - (3) By the Licensee's attorneys in connection with any potential, threatened or actual litigation;
  - (4) By the Authority for the purpose of compiling, verifying or auditing any reports, accounts or other information required under this licence.
- The Licensee shall not monitor or disclose the contents of any communication conveyed as part of any of its value added network services except-
  - (1) Where it may be necessary for the purposes of maintaining or repairing any part of any telecommunication facilities used to provide such value added network services; or
  - (2) Where requested to do so by a person authorised to make such request by applicable law.

#### BILLING

## 6. The Licensee shall

- (1) Determine the content and format of its bills to customers provided that such bills shall:
  - (a) Accurately reflect the types of service, the units charged and the charge per unit; and
  - (b) Contain sufficient information to identify the basis for the amounts charged.
- (2) Provide the Authority with an independent quality assurance that the billing process complies with the requirements set forth in paragraph (1).

## ASSISTANCE AND CUSTOMER COMPLAINTS

 The Licensee shall establish efficient procedures for dealing with customer complaints and to provide customers with such service assistance as and when they may require.

#### **PROVISION OF INFORMATION**

- The Licensee shall provide to the Authority, within seven working days, any relevant information or reports as are requested by the Authority for the purposes of exercising its powers, duties and functions under the Act.
- 9. The Authority shall ensure that any information or all or any part of any report referred to in condition 8 reasonably justifying confidentiality, such as commercially sensitive or proprietary information relating to the financial capacity or business plans of the Licensee or trade secrets, shall not be open to public inspection or disclosed to any third party.

#### REVOCATION

- 10. This licence may be revoked by the Authority at any time by ninety (90) days notice in writing given to the Licensee at its registered office in any of the following circumstances:
  - (1) If the Licensee agrees in writing with the Authority that this licence should be revoked;
  - (2) If the Licensee repeatedly fails to comply with an order by the Authority under section 100 (3) of the Act (which order has not been set aside by or is not the subject of proceedings before a court as referred to in section 100 (4) of the Act) and such failure is not rectified within ninety (90) days after the Authority has notified the licensee in writing, or
  - (3) if the Licensee is placed in final liquidation or under a provisional or final judicial management order.

## **GENERAL CONDITIONS**

- 11. This licence will come into effect on the date of issue and remain valid for a period of five (5) years from that date unless revoked in terms of condition 10.
- 12. The licensee shall on each anniversary of the date of issue pay to the Authority an annual licence fee of R15000 to be adjusted annually by the Authority for inflation by taking into account changes in the Consumer Price Index for the immediately preceding calendar year.
- 13. The Licensee may not transfer or assign any of its rights under this licence without the prior written consent of the Authority.

14. The Licensee shall not show any undue preference to, or exercise undue discrimination against customers or potential customers in respect of the provision of value added network services.

Issued at	on	day of	20	*	
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Chairperson	24 At 19	36	Chief Executive Officer		

## **NOTICE 1413 OF 2001**

## INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA HEREBY, IN TERMS OF SECTION 27 OF THE TELECOMMUNICATIONS ACT OF 1996 ("THE ACT"), GIVES NOTICE TO THE PUBLIC OF ITS INTENTION TO HOLD AN ENQUIRY ON THE PROPOSED TERMS & CONDITIONS OF A PRIVATE TELECOMMUNICATIONS NETWORK LICENCE.

Interested persons are hereby invited to submit written representations in relation to this enquiry to the Authority by no later than 13h00 on Friday, 29<sup>th</sup> of June 2001 by post, hand delivery or facsimile transmission. Where available a softcopy of the corresponding hardcopy of the representation should be e-mailed to matta@icasa.org.za.

The written representations must be addressed to **Mr Andries Matthysen**, Acting HOD: Telecommunication Licensing, Independent Communications Authority of South Africa, Private Bag X1, Marlboro, 2063, or Block A, Pin Mill Farm, 164 Katherine Street, Sandton, Facsimile (011) 321-8550, Tel 011 321-8377 or Cell 083 326 3543.

Persons making written representations must clearly indicate in their representations if they wish to make oral representations including the duration thereof which shall not exceed one (1) hour. Should a request for oral representations be received then public hearings shall be held on the 11<sup>th</sup> of July 2001 at 09h30 at Block B, Pin Mill Farm, 164 Katherine Street, Sandton, Gauteng.

MANDLA LANGA CHAIRPERSON ICASA

## Proposed Private Telecommunication Network (PTN) Licence

### INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

## LICENCE FOR THE CONSTRUCTION AND USE OF A PRIVATE TELECOMMUNICATION NETWORK

In terms of the provisions of section 41 of the telecommunications Act (Act 103 of 1996) and the applicable regulations

"PTN Provider's Name"

hereafter called the Licensee, is hereby licensed to construct and use a private telecommunication network, subject to the following terms and conditions:

### **DEFINITIONS AND INTERPRETATIONS**

- In this licence, unless otherwise stated, words and terms used shall have the same meaning as
  defined in the Telecommunications Act, (Act No. 103 of 1996, as amended) and any regulations
  derived therefrom.
  - "Act" means the Telecommunications Act, 1996 (Act No. 103 of 1996, as amended)
  - "Consumer Price Index" means the index of consumer prices applicable to all economic sectors compiled and published by the Central Statistical Service.

## RIGHTS AND OBLIGATIONS OF THE LICENSEE

- 2. Unless otherwise stated
  - (1) The Licensee shall be entitled, subject to the other provisions in this licence, to utilise the network to provide any and all types of telecommunication services principally and integrally related to the operations of its business.
  - (2) This licence shall not be construed as granting any rights to a portion of the income generated by external traffic terminating on the network of Licensee.
  - (3) The Licensee shall obtain all telecommunication facilities used for the provision of the private telecommunication network from a licensed public switched telecommunication service provider.
  - (4) Only type-approved equipment may be used in the construction of or be connected to the private telecommunication network.
  - (5) The Licensee may not permit the private telecommunication network to be used for the bypassing of the public switched telecommunication network(s).

## SERVICE LEVELS AND DIFFICULTIES

3. The Licensee shall ensure that the private telecommunication network is capable of carrying the busy hour traffic between all nodes at a grade of service equal to or better than one lost call in

five hundred and to this effect

- (1) install a suitable network management system, and
- (2) establish efficient procedures for dealing with service complaints.

## PROVISION OF INFORMATION

- 4. The Licensee shall provide to the Authority, within seven working days, any relevant information or reports as are requested by the Authority for the purposes of exercising its powers, duties and functions under the Act.
- 5. The Authority shall ensure that any information or all or any part of any report referred to in condition 4 reasonably justifying confidentiality, such as commercially sensitive or proprietary information relating to the financial capacity or business plans of the Licensee or trade secrets, shall not be open to public inspection or disclosed to any third party.

## REVOCATION

- 6. This licence may be revoked by the Authority at any time by ninety (90) days notice in writing given to the Licensee at its registered office in any of the following circumstances:
  - (1) If the Licensee agrees in writing with the Authority that this licence should be revoked;
  - (2) If the Licensee repeatedly fails to comply with an order by the Authority under section 100 (3) of the Act (which order has not been set aside by or is not the subject of proceedings before a court as referred to in section 100 (4) of the Act) and such failure is not rectified within ninety (90) days after the Authority has notified the licensee in writing, or
  - (3) If the Licensee is placed in final liquidation or under a provisional or final judicial management order.

## **GENERAL CONDITIONS**

- 7. This licence shall come into effect on the date of issue and shall remain valid for a period of five (5) years from that date unless revoked in terms of condition 6.
- 8. The licensee shall on each anniversary of the date of issue pay to the Authority an annual licence fee of R10000 to be adjusted annually by the Authority for inflation by taking into account changes in the Consumer Price Index for the immediately preceding calendar year.
- 9. The Licensee may not transfer or assign any of its rights under this licence without the prior written consent of the Authority.

Issued aton	day of 20 By
Chairperson	Chief Executive Officer

March 11 (12) at 401.

#### **NOTICE 1414 OF 2001**

## INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA HEREBY, IN TERMS OF SECTION 27 OF THE TELECOMMUNICATIONS ACT OF 1996 ("THE ACT"), GIVES NOTICE OF ITS FINDINGS & CONCLUSIONS WITH RESPECT TO THE SECTION 27 ENQUIRY INTO WHETHER A VIRTUAL PRIVATE NETWORK CONSTITUTES A MANAGED DATA NETWORK SERVICE (MDNS) OR NOT.

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MANDLA LANGA CHAIRPERSON **ICASA** 

Independent Communications Authority of South Africa Findings and Conclusions on the s27 Enquiry on Whether a Virtual Private Network (VPN) constitutes a Managed Data Network Service (MDNS) or not.

## 1. Background

- 1.1. On 11 October 2000, the Independent Communications Authority of South Africa (ICASA) issued Notice 4043 of 2000 in Government Gazette number 21642, requesting representations from interested parties on whether a Virtual Private Network (VPN) constitutes a Managed Data Network Service (MDNS) or not.
- 1.2. The Authority received fourteen (14) written representations on 9 November 2000. Four (4) respondents made oral representations to the special committee appointed by the ICASA Council at the hearing, which was held on 23 November 2000.
- 1.3. Arguments have been presented by various stakeholders, both in written submissions and during the hearing, in an attempt to demonstrate that a VPN is on the one hand a PTN and on the other hand a Value Added Network Service (VANS), specifically a MDNS.

## 2. Findings

In the light of the above-mentioned the Authority has reached the following findings and conclusions:

## 2.1. Background

The legal basis for the issues and dispute are:

- 2.1.1. Value Added Network <u>Services</u> are provided in terms of a VANS licence issued by the Authority in terms of section 40 of the Act.
- 2.1.2. A Private Telecommunication <u>Network</u> licence is issued by the Authority in terms of section 41 of the Act. In terms of section 41(1)(b), a licence shall be required for the provision of a PTN only where such network is interconnected to the PSTN.
- 2.1.3. VANS providers claimed that the term VPN is commonly used to indicate to VANS customers that the MDNS type of VANS, which are provided concurrently to many users over shared infrastructure, can have the same

attributes as those provided by a PTN. On the other hand, Telkom claimed that any VAN service that has the attributes of a PTN is *per se* a PTN and as such may not be provided as part of VANS as it would be contravening Telkom's PSTS exclusivity.

## 2.2. Legislative and Regulatory Framework

In any attempt to determine whether a VPN constitutes a PTN or a MDNS, arguments for or against either has to be considered within the legislative and regulatory context, as well as existing practices and markets demands, as they exist at the time. In this respect in South Africa the following situation presently exists:

- 2.2.1. Telkom enjoys statutory exclusivity in respect of the provision of the public switched telecommunications network (PSTN) and public switched telecommunication services (PSTS) (which are conveyed over the PSTN), with the exception of customer premises equipment (CPE) and VANS.
- 2.2.2. The Act does not define VANS but recognises MDNS as a form of VANS.
- 2.2.3. In terms of s40(3) of the Act a VANS may not be used for the conveyance of voice signals until a date to be determined by the Minister.
- 2.2.4. The Act implies and the proposed VANS regulations stipulate that a VANS shall "add value" to signals that are conveyed on behalf of customers over the shared infrastructure.
- 2.2.5. In terms of s41 of the Act, PTN is not defined, however, the Act stipulates that a PTN may convey both voice and data signals that (must be) "principally and integrally" related to the activities of the PTN user.
- 2.2.6. S40(2) and s41(2) of the Act stipulate that VANS providers and PTN users respectively, shall construct their networks by means of telecommunication facilities provided by Telkom.
- 2.2.7. Both VANS providers and PTN users may self-provide the CPE necessary to construct their respective networks.
- 2.2.8. The term VPN is not mentioned in the Act.

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2.2.9. The Authority has classified the Internet, specifically Internet access, as a VANS.

## 2.2.10 The main difference between a VANS and a PTN is that

- (a) VANS provision is a commercial service in the competitive domain of the telecommunication sector, consisting of non-voice telecommunication services provided by the VANS licensee to its clients (for a fee) over shared infrastructure, during which value not normally provided by Telkom as part of its standard services, is added, whereas
- (b) A PTN is a network constructed for and operated by the licensee for purposes principally and integrally related to the operations of the licensee. The services on a PTN are not of a commercial nature. Although telecommunication traffic to or from customers of the PTN licensee are carried on the PTN in the course of their business dealings with the PTN licensee, such calls are not charged for by the PTN licensee. As the PTN is dedicated only to the operations of the licensee, it can be used as benchmark for service standards such as availability, reliability and security.

## 2.2.11 Technical position of a VANS (MDNS) and a PTN

- (a) Both value added (VAN) and private telecommunication (PTN) networks are constructed or configured by means of telecommunication facilities obtained from Telkom to interconnect the separate, non-contiguous sites involved, and to which Customer Premises Equipment (CPE) is connected in order to provide the respective services.
- (b) VANS licensees are presently prohibited from offering voice services over the VAN. However, the CPE used in the provision of VANS may use any kind of technology, provided it is approved by the Authority. The services provided by VANS may even, for example, use TCP/IP (but not VoIP) protocols (see 3.3).
- (c) The PTN may be used for both voice and non-voice type services.

  Therefore, CPE employing any kind of technology, ranging from analogue telephony to ISDN, may be used provided it has been approved by the Authority.

- (d) Both networks (VAN and PTN) are tiered telecommunications networks. The first tier consists of the basic telecommunication facilities as provided exclusively by Telkom. The second and any further tiers are provided by PTN licensees (for their own use) and by VANS licensees (to their customers on a commercial basis). Any addition on top of the first tier is part of the PTN or the VANS.
- (e) A "Virtual Private Network" (VPN) is created in a VANS by the application of software based technological intervention in the operation of the VANS, order to ensure certain characteristics (privacy, security, guaranteed levels of availability and reliability) in communications between specified participants. A VPN is another tier on top of the VANS, which by itself is a second tier on top of the telecommunication facilities obtained from Telkom, used in the construction of a value added network.

## 3. Conclusion

In view of the foregoing, the Authority has come to the following conclusion:

- 3.1. The Act clearly distinguishes between a PTN and a VANS. Certain desirable service characteristics (normally associated with a PTN) can be achieved by software based technological intervention in the operation of any network (PTN or VANS) and is commonly referred to as a VPN. However, the VPN has no physical substance and is only manifested by the service characteristics it confers on the VANS.
- 3.2. While the raison d'etre for the application of VPN techniques to a VAN is to create services that have some of the attributes associated with PTN, this does not per se mean that the network to which it is applied ipso facto becomes a PTN. Regardless of the stated similarities to a PTN, such services are provided on the Value Added Network in shared mode to many users.
- 3.3. A VANS licensee, who strictly complies with the requirements of section 40 of the Act, can in no way be considered to be engaged in the provision of a PTN. These requirements are inter alia.
  - The simultaneous conveyance on shared infrastructure of signals generated by customers, (of which the telecommunication facilities portion have been provided by Telkom);

- b) The adding of value, and
- c) No conveyance of voice signals.
- 3.4. Similarly, a PTN licensee who strictly complies with the requirements of section 41 of the Act can in no way provide a VANS/MDNS. These requirements are:
  - a) The network is constructed for <u>own use</u> by means of dedicated infrastructure (of which the telecommunication facilities have been provided by Telkom or in future by any other PSTS licensee), and
  - b) The conveyance of both voice and non-voice signals as the need arises is permitted.
- 3.5. Within this context the VANS/MDNS licensee is entitled to apply any technical resources (redundant capacity and technological intervention) and managerial skills (management of the redundant capacity and technological intervention) to signal processing, packetising and encryption in order to meet customer requirements in respect of availability, reliability and security. The application of such resources and skills is part of the value adding process and is a regulatory and commercial necessity. In this regard it is worth noting that customer perceptions of the services received are of vital commercial importance to the VANS licensee but irrelevant from a regulatory perspective.
- 3.6. Within this context, a PTN may not be used to provide and sell services to third parties.
- 3.7. It must be noted that "VPN techniques" can also be applied with benefit to PTNs and even the PSTN, for example to differentiate between and separate different types of calls in order to ensure preference for mission critical traffic within the PTN and/or PSTN.
- 3.8. It is a reality that e-commerce, and the demands it makes on availability, reliability and security of any telecommunication service, via the public Internet (a VAN), play an ever increasing role in the South African economy.
- 3.9. Within the present legal context, the so-called "VPN" is neither a MDNS or a PTN but is manifested as desirable service characteristics resulting from software based technological intervention in the management, configuration and operation of a VANS, which is a legal service in terms of section 40 of the Act, particularly section 40(4)(b).

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