

CRAN
Communications Regulatory
Authority of Namibia

Discussion Document: Telecommunication Market Study and Dominance

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Abstract & Summation:



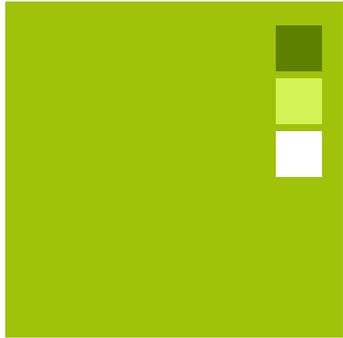


Table of Contents

Introduction	1
Functions of Dominance in the Communications Act	2
Definition of Dominance	5
Market Definitions	7
Approach 1: Service and technological neutral market definition	7
Approach 2: Based on Technology Neutrality	9
Approach 3: Service and technological neutrality but distinguished by distribution channel	10
Approach 4: Demand-side and supply side substitutability.....	11
Approach 5: Market Definitions by Licence Categories.....	14
Conclusions & Recommendations	15



Introduction

Section 78 of the Communications Act No. 8 of 2009 (Act) requires CRAN to determine which licensees hold a dominant position. This section applies only to telecommunications services and not to broadcasting services. This discussion document is thus limited to the telecommunication market only.

A hearing needs to be held in this regard. Dominant operators have additional obligations according to the Act. In order to determine which of the licensees are holding a dominant position, markets have to be defined. This allows CRAN to issue ex-ante regulations directed at dominant operators and to determine ex-post any abuse of a dominant market position.

CRAN needs to define markets and dominance based on the objectives of the Act and the converged licensing regime that is currently being implemented in Namibia. CRAN may enforce fair competition through the Act and/or through licence conditions. The key is thus to establish how market and dominance definitions affect CRAN's abilities to fulfil its mandate and what function the determination of dominance has in the Act.

Communications Act 8 of 2009 - 78. Determination of dominant position

- (1) Subject to subsection (2) the Authority must hold a hearing within one year from the date of commencement of this Act and thereafter every three years in order to determine which licensees hold a dominant position in the market.
- (2) A licensee may request the Authority to conduct such a hearing earlier than required by subsection (1) and the Authority must hold such hearing, if the licensee requesting such a hearing presents sufficient information to the Authority to convince it that there is a prima facie case that a different licensee has become a dominant provider of telecommunications services.
- (3) The Authority may also conclude that a licensee is dominant in respect of a specific class of telecommunications services when it is considering a matter where the question of dominance is relevant: Provided that it gives all parties affected by that finding an opportunity to be heard on that matter.
- (4) Subject to subsection (5), the Authority must find a licensee to be dominant if it is of the opinion that –
 - (a) the licensee in question has such a share of the market in the class of telecommunications services in question, that it is able to act independent of its competitors;
 - (b) the licensee controls some infrastructure that is necessary for the provision of the services in question;
 - (c) the licensee in question is dominant as provided in paragraph (a) or (b) in respect of a class of related services (which need not be telecommunications services) and the licensee can use that dominance to exercise power in the market for the telecommunications services in question; or
 - (d) the licensee in question has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.
- (5) The Authority must consider the market power that may be exercised by a competitor of the licensee concerned in order to determine whether any of the matters referred to in subsection (4) will give the licensee concerned market power as contemplated in subsection (4).

Functions of Dominance in the Communications Act

The provisions of the Act allow CRAN to prescribe regulations applicable only to dominant operators and prohibit abuse of market power. The main aim is to promote competition by leveraging Namibia's infrastructure given Namibia's small population, limited resources and small market size. The intent is to let existing networks be used by competitors to avoid duplication while achieving the highest level of competition. The table below lists sections of the Act that allow particular treatment for dominant operators.

Table 1: Dominance section in the Act and their objectives		
Act	Objective	Recommendation
33 (2) Any abuse of individual or collective dominant position by one or more persons in a market for the supply of telecommunications or broadcasting services or any product used in connection with these services is prohibited.	Prohibit abuse of market power	Can be dealt with through licences additional to regulation Should apply to all operators
38 (11) The Authority may impose specific obligations on a licensee when the licensee has a dominant position in relation to the provision of any class of telecommunications services.	Provide the regulator with the discretion to treat operators differently based on dominance	Can be dealt with through licences additional to regulation
38 (14) When the Authority acts under subsection (12) or (13), it may – a) make distinctions between licensees who are dominant and those that are not, or between services for which licensees are dominant and those for which they are not;		
44 (2) The Authority may restrict the provision of telecommunications equipment by a licensee that is dominant in a market relating to the use or provision of such equipment by prescribing such accounting rules and other regulatory safeguards as it may consider necessary for the promotion of competition, after having followed a rule-making procedure.	No quite clear	Can be dealt with through licences of Telecom Namibia
48 (2) It is the duty of a carrier who has a dominant position with relation to some class of telecommunications services to: (a) provide subject to subsection (3), to any requesting carrier, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement between them and the requirements of this Act; (b) provide subject to subsection (5), on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical co-location of equipment necessary for interconnection or access to unbundled network elements at the premises of the dominant carrier, if such network elements relate to the market segment in which the carrier in question is dominant.	Require dominant operators to share facilities, co-locate and re-sell. Places a limit on what operator may charge for such services	Can be dealt with through licences additional to regulation
48 (3) Subject to subsection (4), a dominant carrier must provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide the telecommunications service concerned.		
49 (8) A carrier who is dominant in respect of any services relating to the request for interconnection must allow such interconnection at any technically feasible point within its network and such interconnection must be accomplished without unreasonable interruption of service to existing users.	Dominant operators are required to interconnect	Can be dealt with through licences additional to regulation Should apply to all operators

Table 1: Dominance section in the Act and their objectives		
Act	Objective	Recommendation
50(1) When it will promote competition or the other objects of this Act, a dominant carrier must lease any infrastructure to any other carrier or must allow the latter carrier to install telecommunications equipment on such infrastructure or to otherwise utilise such infrastructure: Provided that the dominant carrier may refuse to make such infrastructure available if – (a) such infrastructure is required by the dominant carrier for its own purposes; (b) in all the circumstances, the making available of such infrastructure will impose an unreasonable burden upon the dominant carrier; or (c) the making available of such infrastructure is likely to affect the service of the dominant carrier detrimentally.	Prescribe facilities leasing to promote competition	Can be dealt with through licences additional to regulation Should apply to all operators
50(2) A dominant carrier may request the Authority to exempt it from any duty imposed by this section for a period of six months.		
50(3) A request contemplated in subsection (2) may be granted by the Authority, if the dominant carrier can prove that if it complies with the duty concerned, it would not be able to perform any expansion which it plans to perform.		
50(4) If any expansion is not performed within six months from the date on which the Authority granted the exemption contemplated in subsection (2), then the dominant carrier will be obliged to comply with the request concerned.		
50(8) A dominant carrier or the utility who leases the infrastructure must maintain that infrastructure and facilities installed in its premises or facilities, in return for the payment of compensation negotiated between the parties.		
51(2) A licensee who is dominant in respect of some class of telecommunications services must offer such telecommunications services for resale at a discounted rate to any requesting reseller.	Prescribe reselling	Can be dealt with through licences additional to regulation Should apply to all operators with national networks
54(2) A dominant licensee and any other licensee designated by the Authority must keep separate accounts for its telecommunications activities, to the extent that would be required if the telecommunications activities in question were carried out by legally independent companies, so as to identify all elements of costs and revenue, with the basis of their calculation and the detailed attribution methods used.	Prescribing accounting standards to objectively estimate costs for selected services such as interconnection and facility leasing as well as determining market dominance	Can be dealt with through licences additional to regulation
54 (3) Such accounting procedures must be followed and implemented by the dominant licensee and, where appropriate, other licensees designated by the Authority in terms of subsection (1).		
54 (5) The dominant licensee and other licensees required to adopt such accounting systems must provide financial information to the Authority promptly on request and at the level of detail required by the Authority.		

Generally, the objectives of the Act with respect to dominant operators can be implemented through licence conditions. In particular since many of the provisions would not only be suitable for a dominant operator but for any operator operating a national network. The current licences of Leo and MTC comply already with the act as if they were dominant operators (part 6 of Leo's and MTC's licences). Specific regulation only relevant to dominant operators may complement this.

MTC's licence - 29 March 2007, No. 3815 / LEO's Licence - 11 August 2006, No 3676

PART SIX - RELATIONS WITH OTHER OPERATORS

19. ANTI-COMPETITIVE PRACTICES

19.1 The Licensee and its agents, contractors and Service Providers shall not show any undue preference to, or exercise undue discrimination against any person or class or description of persons in respect of the provision of any Service or in respect of the construction or maintenance of the Licensed Lines.

19.2 The Licensee will not alone or together with others, engage in or continue or knowingly acquiesce in any anti-competitive practices and, in particular, the Licensee shall:

- a) not engage in any anti-competitive cross-subsidisation;
- b) not engage in the abuse of its dominant position, if any;
- c) not enter into any exclusive arrangements with third parties for the location of its facilities that are acquired to provide the Service;
- d) not enter into any agreements, arrangements or undertakings with any Person, including any supplier of services that compete with the Service which have as their objective or effect the fixing of prices or any other restraint on competition;
- e) not engage in any anti-competitive tied or linked sales practices, provided that the Licensee may bundle services so long as the bundled services are also available separately; The Authority may give case by case exceptions to the Licensee in this regard;
- f) not use information obtained from competitors if the object or effect of such use is anti-competitive; and
- g) The Licensee shall cooperate with other Licensees in order to facilitate the provision of public telecommunications services.

19.3 The Licensee shall include a provision in its contracts with its Service Providers requiring that they comply with a code of practice for consumer affairs to be established by the Licensee at least containing

- a) guidance to their customers in respect of disputes or complaints relating to the provision of the Service by them;
- b) advice to such customers on charging and billing and concerning such enquiries;
- c) advice and procedures on the proper use of the Service by such customers; and
- d) standards of conduct expected in the provision of the Service by Service Providers to their customers.

19.4 Notwithstanding the provisions of paragraph 19.1, the Licensee may provide the Service to a customer or Service Provider on charges, terms and conditions which are preferential if -

- a) the charge in question is in accordance with a tariff plan which has previously been lodged as required; or
- b) the Service is provided as a Community Service and any Universal Service requirement in terms of an agreement with the Authority; and
- c) the terms and conditions have been duly lodged.

19.5 The Licensee shall lodge with the Authority sample copies of all contracts relating to the Service or the provision of the Service entered into between the Licensee and any customer and Service Provider.

Including the obligations of the Act dealing with dominant operators in the licences for all individual or comprehensive class licensees would mean CRAN would not need to define markets nor define dominant operators to implement the objectives of the Act. It is however, obliged to determine dominant operators for telecommunication services by section 78 of the Act.

Including the obligations in the licences would mean that the market definition and determination of dominance would have less regulatory implications compared to other jurisdictions, South Africa, for example. However, the dominance determination may be required at a later stage for competition issues and determining the abuse of market power.

Definition of Dominance

The ICT Regulatory Toolkit¹ states that there is no universally accepted definition of dominance. However, in general, a firm is considered to be dominant based on its market share. In some jurisdictions additional factors are also considered in assessing dominance. For example the European Commission also takes into account firm size, the role of any essential facility, any technological advantages, or privileged access to financial resources, the strength of the countervailing power of consumers, economies of scale and scope, barriers to entry, product differentiation, potential competition, and the type and availability of sales channels. The table below provides summaries of dominance definitions from other jurisdictions.

Table 2: Dominance definitions for other jurisdictions		
Country	Source	Definitions for Dominant firms
South Africa	Competition Act, 1998, (7), Gazette No. 19412, 1998	A firm is dominant in a market if: (a) it has at least 45% of that market (b) it has at least 35%, but less than 45%, of that market, unless it can show that it does not have market power or (c) it has less than 35% of that market but has market power.
Kenya	Act No 12 of 2010 - Competition Act	23. (1) For purposes of this section, “dominant undertaking” means an undertaking which — (a) produces, supplies, distributes or otherwise controls not less than one-half of the total goods of any description which are produced, supplied or distributed in Kenya or any substantial part thereof; or (b) provides or otherwise controls not less than one-half of the services which are rendered in Kenya or any substantial part thereof.
Tanzania	The fair Competition Act, 2003	(6) A person has a dominant position in a market if both (a) and (b) apply: (a) acting alone, the person can profitably and materially restrain or reduce competition in that market for a significant period of time; and (b) the person's share of the relevant market exceeds 35 per cent.
Botswana	Competition Act, No 17 of 2009	Definition: “dominant position” means a situation in which one or more enterprises possess such economic strength in a market as to allow the enterprise or enterprises to adjust prices or output without effective constraint from competitors or potential competitors;
EU	Official Journal of the European Union (24/2/2009, C45/7)	12. The assessment of dominance will take into account the competitive structure of the market, and in particular the following factors: — constraints imposed by the existing supplies from, and the position on the market of, actual competitors (the market position of the dominant undertaking and its competitors), — constraints imposed by the credible threat of future expansion by actual competitors or entry by potential competitors (expansion and entry), — constraints imposed by the bargaining strength of the undertaking's customers (countervailing buyer power). 13. Market shares provide a useful first indication for the Commission... 14. The Commission considers that low market shares are generally a good proxy for the absence of substantial market power. 15. Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of the existence of a dominant position and, in certain circumstances, of possible serious effects of abusive conduct, justifying an intervention by the Commission under Article 82 (1).

From the brief overview above the South African definition of dominance seems to be the most suitable for Namibia. It is based on market share while at the same time takes into account that other factors may provide market power to a company other than market share.

The Competition Act of 2003 (No.2964) stipulates: “25. For the purposes of this Part, the Commission must prescribe criteria to be applied for determining whether an undertaking has, or two or more undertakings have, a dominant position in a market, which may be based on any factors which the Commission considers appropriate.” The Namibian Competition Commission (NaCC) has not yet set out the definition for dominance. This is expected for later in 2012.

¹ <http://www.ictregulationtoolkit.org/en/Section.1711.html#Dominance>

A Namibian definition of domination for licensed markets needs to take Section 78 (4) of the Act into account that requires that CRAN needs to declare operators as dominant that:

- have a share of the market in the class of telecommunications services in question, that it is able to act independent of its competitors;
- controls some infrastructure that is necessary for the provision of the services in question;
- are able to exercise power in the market for the telecommunications services in question; and
- have a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.

Combining these two elements and determining the definition for market share in terms of measure and scale results in the proposed definition for a dominant telecommunications operator for Namibia:

A licensee is dominant in a market if:

- It has at least 35% of market share or more based on revenues;
- It has less than 35% market share but controls some infrastructure that is necessary for the provision of the services in question;
- It has less than 35% market share but is able to exercise power in the market for the telecommunications services in question; or
- It has less than 35% market share but has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.

Market share maybe measured in various ways including revenue, subscribers and traffic. Revenues are however the easiest available and most reliable indicator of market share.

The South African dominance definition specifies two thresholds, 45% and 35%. These thresholds need to be understood in context of expected number of firms in a market. Among 50 operators one that holds 15% market share may be dominant, in a market with only two operators, a firm with 50% or more market share may be dominant, for example. The suggested threshold for Namibia is 35% given the expectation of five or more firms operating in a market. An dominant operator would thus be a dominant operator with a marketshare of more than a third of the market.

The assessment of dominance for each market will use the following table.

Table 3: Assessment of Dominance for the Telecommunications Market				
		Operator A	Operator B	...
1	Above 35% Market Share?	(Yes/No)	(Yes/No)	(Yes/No)
2	Controls some infrastructure that is necessary for the provision of the services in question;	(Yes/No)	(Yes/No)	(Yes/No)
3	Is able to exercise power in the market for the services in question	(Yes/No)	(Yes/No)	(Yes/No)
4	Has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of services in Namibia.	(Yes/No)	(Yes/No)	(Yes/No)
Dominant (Yes/No)		(Yes/No)	(Yes/No)	(Yes/No)

The table checks for the four criteria spelled out in section 78 (4) of the Act. A “Yes” in any of the four criteria would lead to the declaration of dominant for an operator.

Market Definitions

The ICT Regulatory Toolkit defines a market as all those goods or services that are close substitutes in the eyes of buyers. Whether two services should be considered to be in the same market depends on the extent to which they are reasonable substitutes from the point of view of consumers (“functionally equivalent”) and/or from the point of view of suppliers (how easily can firms not already supplying the product or service in question start doing so?).²

Geographic boundaries of a market may also be considered if, for example, licences are being awarded for specific geographic areas only such as regions.³ This is however not the case in Namibia and no further consideration is given to geographic boundaries in this document.

Markets may also be distinguished by distribution channel, i.e. between wholesale and retail markets. A further distinction may include residential markets and business customers, segments that are being treated differently by value added tax for example.

CRAN’s suggested principles for defining markets are:

- effective in implementing the objectives of the law;
- practical to implement and measure;
- minimise reporting burden for operators; and
- suitable for a converged ICT sector based on technological and service neutral regulation.

These principles can be implemented in various forms and five approaches are being discussed in the following sections. They include:

- Approach 1: Service and technological neutral market definition
- Approach 2: Technology neutrality
- Approach 3: Service and technological neutrality but distinguished by distribution channel
- Approach 4: Demand-side and supply side substitutability
- Approach 5: Based on licence categories

Approach 1: Service and technological neutral market definition

CRAN will be issuing service and technologically neutral telecommunications licences for telecommunication operators and ISPs. The convergence of voice and data services as well as the mix in technologies (mobile, fixed, fixed-wireless) bring more competition and new products and services to the Namibian market. This requires market definitions that will stand up to the changes that this new converged environment will bring.

A single markets result from service and technological neutrality. Dominance for the telecommunication market would be determined based on the revenue shares of all licensees.

	Revenue 2010 in N\$ million	Market Share
Leo (confidential)	128.8	4.69%
MTC	1,407	51.22%
Telecom Namibia	1,161	42.27%
ISPs (arbitrary assumption for all ISPs together)	50	1.82%
Total	2,747	

According to the dominance definition of the previous section MTC and Telecom Namibia would be dominant based on having more than 35% market share.

Telecom Namibia, MTC and Leo would be dominant based on the second criteria, control over infrastructure. The other criteria would need more consideration that go beyond the scope of

² <http://www.ictregulationtoolkit.org/en/Section.1710.html>

³ In this context the SSNIP (small but significant and non-transitory increase in price) test is often proposed to be used. This test is not very practical for the telecommunications sector since prices rarely increase)

this discussion document. Leo, TN and MTC can however already been declared dominant operators based on criteria one and two.

Table 5: Assessment of Dominance for a single Telecommunication market				
	TN	LEO	MTC	Other ISPs
Above 35% Market Share?	Yes	No	Yes	No
Controls some infrastructure that is necessary for the provision of the services in question;	Yes	Yes	Yes	No
Is able to exercise power in the market for the services in question	Maybe	Maybe	Maybe	No
Has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.	No	No	Maybe	No
Dominant (yes, if a single category applies)	Yes	Yes	Yes	No

This very simple market and dominance definitions may be the most suitable for Namibia based on the following reasons:

- The market definition would be suitable for a converged telecommunications sector.
- It would be practical and simple to implement for CRAN since dominance can be determined by revenues of audited financial statements.
- Criteria three and four would only need to be evaluated new licensees and ISPs
- The objectives of the act are already enforced by the licence conditions.
- The approach minimises reporting burden for operators since it requires only annual audited statements that operators are anyway required to furnish to the regulator.

Would these market definitions allow CRAN to deal with specific instances of market power abuse?

If, for example, Telecom Namibia would abuse its monopoly in ADSL (fixed-broadband) then this would be a licence violation. It would further be a violation of the Act since it had been declared a dominant operator. This examples demonstrates that this simple definition in combination with licence conditions may suffice for Namibia's regulatory purposes.

The down side is that the wider a definition is, ie the fewer markets are being defined the less likely will there be a dominant operator based on market share. This would however not be a concern for Namibia due to the small market.

Approach 2: Based on Technology Neutrality

A further approach could be to define markets based on technological neutrality but not service neutrality, i.e. voice and data but not distinguishing between mobile, fixed or fixed wireless.

Table 6: Example of market definitions in terms of technology neutrality (6 months 1 April -31 September 2011 based on operators reporting to CRAN)

Operators	Voice		Data	
	Revenues in N\$ million	Market share	Revenues in N\$ million	Market share
MTC	478	62.7%	133.8	27.6%
LEO	7	0.9%	1.7	0.4%
Telecom Namibia	277	36.4%	299.4	61.7%
ISPs (arbitrary assumption for all ISPs together)	0	0.0%	50	10.3%
Total	762		484.8	

Voice: TN and MTC would be dominant for voice, for having more than 35% market share. Leo would be declared dominant based on the second criteria.

Data: TN would be dominant for data, for having more than 35% market share. MTC and Leo would be declared dominant based on the second criteria.

Table 7: Assessment of Dominance for a voice and data markets

	Voice				Data			
	TN	LEO	MTC	Other ISPs	TN	LEO	MTC	Other ISPs
Above 35% Market Share?	Yes	No	Yes	No	Yes	No	No	No
Controls some infrastructure that is necessary for the provision of the services in question;	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Is able to exercise power in the market for the services in question	Maybe	Maybe	Maybe	No	Maybe	Maybe	Maybe	No
Has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.	No	No	Maybe	No	No	No	Maybe	No
Dominant (yes, if a single category applies)	Yes	Yes	Yes	No	Yes	Yes	Yes	No

A bigger ISPs may be dominant for the data market definition based on data network operated.

This market definition do however not improve the ability of CRAN to implement the objectives of the Act compared to the single telecommunication's market.

Approach 3: Service and technological neutrality but distinguished by distribution channel

A further approach could be to define markets based on service and technological neutrality but distinguish by distribution channel into retail and wholesale. CRAN does not have revenues broken down by retail and wholesale. The following simplifying assumptions are being made for the table below:

- MTC's and Leo's wholesale revenues are limited to termination revenues;
- Telecom Namibia's total revenue are split 60% wholesale and 40% retail;
- The N\$50 million for ISPs, which is a complete arbitrary figure, is split 30 million for wholesale and 20 million for retail and represents the revenues off all ISPs together.

Table 8: Telecommunication only: Example of market definitions in terms of service technology neutrality but distinguished by retail channel (6 months 1 April -31 September 2011 based on operators reporting to CRAN)

Operators	Wholesale		Retail	
	Revenues in N\$ million	Market share	Revenues in N\$ million	Market share
MTC	25.08	6.1%	611.95	69.9%
LEO	1.93	0.5%	8.35	1.0%
Telecom Namibia	352.61	86.1%	235.08	26.9%
ISPs (arbitrary assumption for all ISPs together)	30.00	7.3%	20	2.3%
Total	409.62		875.38	

Retail: Only MTC would be dominant for retail for having more than 35% market share. Telecom Namibia has less than 35% but would not be able to show that it does not have market power based on its de-facto monopoly of residential fixed-lines and ADSL. TN and Leo become dominant operators based on criteria two.

Wholesale: Only TN would be dominant based on market share. Leo and MTC would hover again qualify as dominant operator based on criteria two.

Table 9: Assessment of Dominance for a voice and data markets

	Wholesale				Retail			
	TN	LEO	MTC	Other ISPs	TN	LEO	MTC	Other ISPs
Above 35% Market Share?	Yes	No	No	No	No	No	Yes	No
Controls some infrastructure that is necessary for the provision of the services in question;	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Is able to exercise power in the market for the services in question	Maybe	Maybe	Maybe	No	Maybe	Maybe	Maybe	No
Has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.	No	No	Maybe	No	No	No	Maybe	No
Dominant (yes, if a single category applies)	Yes	Yes	Yes	No	Yes	Yes	Yes	No

This market definition does not improve the ability of CRAN to implement the objectives of the Act compared to the first approach.

Approach 4: Demand-side and supply side substitutability

A much more sophisticated and complex process would be to define markets based on customer and supplier substitutability.⁴

- Demand-side substitutability: Measures the extent to which customers are prepared or able to substitute other telecommunications services for the telecommunications services under consideration.
- Supply-side substitutability: Measures the extent to which suppliers are able to supply other telecommunications services for the telecommunications services under consideration.

The EU defined 18 markets based on these principles in 2003.⁵ Defining it in this way has the advantage of regulating segments separately.

A good example is call termination. If it is defined as a own market then any operator has a monopoly for the numbers it is holding and is thus dominant. For call termination MTC, Telecom Namibia and Leo would be dominant compared to only MTC and Telecom Namibia for the broader approaches 1, 2 and 3.

However, 49 (8) is the only section that refers to dominant operators in the context of interconnection. It states that a dominant operator “MUST” allow ... but does not exclude CRAN from imposing similar conditions on other operators. Thus this section may be included for each licensee not just dominant operators. This means there is no need to define call termination as separate market. MTC's and Leo's licences actually presently require interconnection.

The disadvantages of such detailed market definitions are:

- CRAN would need to analyse each segment individually to determine which operator is dominant;
- operators have to report revenues and costs for each market separately;
- this approach requires prescribing detailed accounting standards for each operator;
- CRAN would need to verified submitted data against audited financial reports;
- the market definitions is not service and technological neutral.

Given that these more sophisticated market definitions would not increase CRAN's ability to safeguard fair competition it would not be advisable to go this route.

⁴ <http://www.itu.int/osg/spu/ni/competition/background/Final%20background%20paper.pdf>

⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:114:0045:0045:EN:PDF>

Table 10: Applicability of Interconnection sections of the Act (Section 49) to dominant and non-dominant operators

Act	Dominant	Other
(1) In accordance with the terms and requirements prescribed by the Authority after a rule-making procedure, all carriers must allow any other carrier to interconnect its network with that of the former carrier for the purpose of the transport and termination of telecommunications and information.	Yes	Yes
(2) A carrier may impose reasonable charges on a requesting carrier for interconnection which charges must be limited to the costs provided for in this section.	Yes	Yes
(3) If a carrier agrees to provide interconnection as contemplated in this section, the charges and all other material terms of that interconnection agreement must be contained in a written agreement.	Yes	Yes
(4) All interconnection agreements must be submitted to the Authority for approval –(a) within 90 days from the date of commencement of this Act, in the case of agreements concluded before the commencement of this Act; (b) within 30 days from the concluding of the agreement in the case of agreements concluded after the commencement of this Act.	Yes	Yes
(5) Unless the parties agree on a later date, an interconnection agreement comes into operation on the date on which it is filed with the Authority.	Yes	Yes
(6) The Authority must approve or disapprove an interconnection agreement within 120 days from the date of filing thereof and may on its own motion act under subsection (7) or allow the parties such an additional period as it thinks fit to conclude an agreement, subject to such determination as it thinks fit.	Yes	Yes
(7) If carriers fail to agree on terms of interconnection within a reasonable period (which may be specified by the Authority), one or both of the parties may request that the Authority determines terms of interconnection in accordance with this section.	Yes	Yes
(8) A carrier who is dominant in respect of any services relating to the request for interconnection must allow such interconnection at any technically feasible point within its network and such interconnection must be accomplished without unreasonable interruption of service to existing users.	Yes	No
(9) The quality of the interconnection must be at least equal to that provided by a carrier to itself, or any affiliate, or any other party to which interconnection is provided.	Yes	Yes
(10) The burden of demonstrating the reasonableness of a disputed practice rests solely on the carrier responsible for implementing interconnection.	Yes	Yes
(11) in resolving any disputes concerning interconnection, the Authority must subject to subsection (12) and (13), adhere to the following principles –(a) the terms and practices for interconnection may not vary depending on the type of telecommunications service to be provided by the carrier requesting interconnection and may not discriminate unjustifiably between users of equivalent interconnection arrangements or similarly situated users; (b) charges for interconnection services and facilities may not exceed the carrier's forward-looking incremental costs: Provided that the Authority may order both parties to an interconnection arrangement to adopt identical interconnection charges based on the demonstrated forward- looking incremental costs of one of the providers if the Authority finds that doing so would promote competition and the efficient provision of interconnection services and facilities; (c) differences in charges between different users can be justified only based on cost differences directly attributable to providing interconnection for those users; (d) costs must be measured according to methods prescribed by the Authority after following a rule-making procedure.	Yes	Yes
(12) to compete effectively with entrenched carriers, the Authority may after conducting a hearing, determine interconnection fees that are more favourable to such carrier. In order to allow a carrier to establish market share or to allow a carrier	Yes	Yes
(13) The Authority may prescribe benchmark charges for interconnection which charges must subject to subsection (12), be determined in accordance with international benchmarks on interconnection and subject to the principles set out in subsection (11).	Yes	Yes
(14) A carrier must charge the benchmark fees prescribed in terms of subsection (13), unless it can prove to the Authority that its forward-looking incremental costs will exceed the benchmark fees prescribed in terms of subsection (13).	Yes	Yes
(15) All carriers must provide reasonable notice to every other carrier whose network is interconnected with its network of changes in the information necessary for transmitting and routing services using its facilities or networks, as well as, of any other changes that affect the interoperability of those facilities and networks.	Yes	Yes
(16) Any carrier who is a party to an interconnection agreement with licensees authorised by foreign countries must submit all such agreements to the Authority –(a)in the case of an agreement concluded before the commencement of this Act, within 90 days from the date of commencement of this Act; (b) in the case of an agreement concluded after the commencement of this Act, within 90 days from the conclusion of the agreement concerned.	Yes	Yes
(17) If an agreement referred to in subsection (16), in the opinion of the Authority, has the effect of impairing competition or the interoperability of the networks of different carriers, the Authority may after holding a hearing impose obligations upon a carrier who is a party to such agreement which would have the effect of remedying such impairment.	Yes	Yes
(18) In the case of an agreement referred to in subsection (16) concluded after the commencement of this Act, the Authority must (within 90 days from the date on which the agreement is submitted to it)approve or order modifications to any terms, including the accounting rate and settlement arrangements, agreed upon by the parties before the agreement can become binding upon the parties.	Yes	Yes
(19) When concluding an agreement referred to in subsection (16) all carriers must comply with all international treaties and bilateral agreements relating to such arrangements, and any requirements prescribed for such arrangements.	Yes	Yes
(20) In reviewing international interconnection arrangements, the Authority must take into account exclusionary and discriminatory practices of foreign providers of telecommunications services and governments.	Yes	Yes

EU defined 18 markets based on these principles in 2003

Retail level

1. Access to the public telephone network at a fixed location for residential customers.
2. Access to the public telephone network at a fixed location for non-residential customers.
3. Publicly available local and/or national telephone services provided at a fixed location for residential customers.
4. Publicly available international telephone services provided at a fixed location for residential customers.
5. Publicly available local and/or national telephone services provided at a fixed location for non-residential customers.
6. Publicly available international telephone services provided at a fixed location for non-residential customers. These six markets are identified for the purpose of analysis in respect of Article 17 of the Universal Service Directive. Together, markets 1 through 6 correspond to 'the provision of connection to and use of the public telephone network at fixed locations', referred to in Annex I(1) of the Framework Directive. This combined market is also referred to in Article 19 of the Universal Service Directive (for possible imposition of carrier call-by-call selection or carrier selection).
7. The minimum set of leased lines (which comprises the specified types of leased lines up to and including 2Mb/sec as referenced in Article 18 and Annex VII of the Universal Service Directive). This market is referred to in Annex I(1) of the Framework Directive in respect of Article 16 of the Universal Service Directive (the provision of leased lines to end users). A market analysis must be undertaken for the purposes of Article 18 of the Universal Service Directive which covers regulatory controls on the provision of the minimum set of leased lines.

Wholesale level

8. Call origination on the public telephone network provided at a fixed location. For the purposes of this Recommendation, call origination is taken to include local call conveyance and delineated in such a way as to be consistent with the delineated boundaries for the markets for call transit and for call termination on the public telephone network provided at a fixed location. This market corresponds to that referred to in Annex I(2) of the Framework Directive in respect of Directive 97/33/ EC (call origination in the fixed public telephone network).
9. Call termination on individual public telephone networks provided at a fixed location. For the purposes of this Recommendation, call termination is taken to include local call conveyance and delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call transit on the public telephone network provided at a fixed location. This market corresponds to the one referred to in Annex I(2) of the Framework Directive in respect of Directive 97/ 33/EC (call termination in the fixed public telephone network).
10. Transit services in the fixed public telephone network. For the purposes of this Recommendation, transit services are taken as being delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call termination on the public telephone network provided at a fixed location. This market corresponds to the one referred to in Annex I(2) of the Framework Directive in respect of Directive 97/ 33/EC (transit services in the fixed public telephone network).
11. Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services. This market corresponds to that referred to in Annex I(2) of the Framework Directive in respect of Directive 97/33/ EC and Directive 98/10/EC (access to the fixed public telephone network, including unbundled access to the local loop) and to that referred to in Annex I (3) of the Framework Directive in respect of Regulation No 2887/2000.
12. Wholesale broadband access. This market covers 'bit-stream' access that permit the transmission of broadband data in both directions and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bit-stream access. It includes 'Network access and special network access' referred to in Annex I(2) of the Framework Directive, but does not cover the market in point 11 above, nor the market in point 18.
13. Wholesale terminating segments of leased lines.
14. Wholesale trunk segments of leased lines. Together, the wholesale markets 13 and 14 correspond to those referred to in Annex I(2) of the Framework Directive in respect of Directive 97/33/EC and Directive 98/10/EC (leased line interconnection) and to those referred to in Annex I(2) of the Framework Directive in respect of Directive 92/44/EEC (wholesale provision of leased line capacity to other suppliers of electronic communications networks or services).
15. Access and call origination on public mobile telephone networks, referred to (separately) in Annex I(2) of the Framework Directive in respect of Directives 97/33/EC and 98/10/EC.
16. Voice call termination on individual mobile networks. This market corresponds to the one referred to in Annex I(2) of the Framework Directive in respect of Directive 97/ 33/EC (call termination on public mobile telephone networks).
17. The wholesale national market for international roaming on public mobile networks. This market corresponds to the one referred to in Annex I(4) of the Framework Directive.
18. Broadcasting transmission services, to deliver broadcast content to end users.

Approach 5: Market Definitions by Licence Categories

CRAN is in the process of converting licences into new licence categories according to the Communications Act 8 of 2009. This discussion is based on the proposed conversion as gazetted in 18 May 2011, Government Gazette 4714.

This sections assumes that TN, Leo and MTC will hold ECNS and ECS licence while all other licensees will have ECS licences that allow self provisioning. The distinction is hence whether or not an operator may build networks for reselling compared to build networks only for self provisioning.

Table 11: Market shares in ECNS Market		
	Revenue 2010 in N\$ million	Market Share
Leo (confidential)	128.8	4.78%
MTC	1,407	52.17%
Telecom Namibia	1,161	43.06%
Total	2,697	

Telecom Namibia and MTC would be dominant based on market share and Leo based on the second criteria for the ECNS market. Not enough information is available at present to classify ISPs. The market share assessment is based on total revenues by licensee.

Table 12: Assessment of Dominance for a voice and data markets					
	ECNS			ECS	
	TN	LEO	MTC	ISP1	ISP2
Above 35% Market Share?	Yes	No	Yes		
Controls some infrastructure that is necessary for the provision of the services in question;	Yes	Yes	Yes		
Is able to exercise power in the market for the services in question	Yes	Yes	Yes		
Has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.	No	No	Maybe		
Dominant (yes, if a single category applies)	Yes	Yes	Yes		

The result of this market definition remains the same as a single market for Leo, TN and MTC. However one or two ISPs will also be classified as dominant within the ECS segment.

Conclusions & Recommendations

The recommended approach that minimises the burden on operators and CRAN while allowing CRAN to implement the objectives of the Act is approach 5, distinguishing two markets - ECNS and ECS. It allows to if required to issue regulation for the ECS market separately. Special obligations foreseen by the Act for dominant operators should be included in the licences.

Approaches		Resulting Markets	Implementing the objectives of the Act	Operator burden	Regulator burden
1	Service and technological neutral market definition	1	Yes	Minimal	Minimal
2	Technology neutrality	3	Yes	Low	Low
3	Service and technological neutrality but distinguished by distribution channel	4	Yes	Medium	Medium
4	Demand-side and supply side substitutability	18	Yes	High	High
5	Based on Licence Categories	2	Yes	Minimal	Minimal

The proposed definition based on Section 78 (4) of the Act is:

A firm is dominant in a market if:

- It has at least 35% of market share or more based on revenues;
- It has less than 35% market share but controls some infrastructure that is necessary for the provision of the services in question;
- It has less than 35% market share but is able to exercise power in the market for the telecommunications services in question; or
- It has less than 35% market share but has a position in a market in another country or a relationship with providers in another country that can be used to exercise market power in respect of the relevant class of telecommunications services in Namibia.

The result of this combination would be that Leo, MTC and Telecom Namibia would be dominant operators for the ECNS market. Dominant operators for the ECS market may be determined once licences are converted and audited financial reports have been collected from all licensees.