

JETHRO CONSULTING SOLUTION PTY LTD



JETcon

INVITATION TO SUBMIT
INPUTS INTO THE CALL
TERMINATION AMENDMENT
REGULATION 2018.

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PRESENTATION OUTLINE



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Introduction



(A) About Us JETCON:

Jethro Consulting Solutions Pty Ltd aspires to be one of the leading consultancies for integrated ICT management and technology consultation. We are a strategic technology consulting firm in the areas of architecture, technology choice and implementation strategy. We advise telecommunications and broadcasting companies, governments, investors and regulatory bodies with innovative solutions developed from the application of modern information and telecommunications technologies. Our comprehensive service portfolio concentrates on strategy, training, marketing, processes, technologies, including the development and implementation of network architectures. JetCon's consultants have an extensive expertise in the mobile networks, fixed networks, and data networks sector.

We provide companies with innovative solutions for the application of modern information and telecommunications technologies, including the development of new business models, the re-engineering of ICT strategies and structures, and the optimization of their company's efficiency through improved organizational processes

We not only deal with the current problems of our clients; we also go beyond that by anticipating the development of new trends and technological innovations. We are therefore intensively involved in topics of major concern to our clients, such as:

- the long-term development and transformation of the international telecommunications markets
- the development and introduction of more flexible business models within the telecommunications industry
- the migration of existing telecommunications networks to "next-generation networks"
- the outsourcing and out-tasking of complete network infrastructures to external operators
- possible answers to the increasing convergence of fixed-network and mobile services

We

- Drive innovations forward as part of our service offerings to customers
- Conceive integral solutions on the basis of our integrated business and technological competence in the ICT sector
- Develop pioneering technologies and set standards for communications technologies
- Provide the energy and experience of consultants for large-scale projects

Our Focus

- JetCon is a focused and specialised ICT market consultancy. Our specialisation in IT, telecoms and Broadcasting and analysis sets us apart in the South African marketplace

JetCon`s National Digital Forums



Key Objectives are:

- Community Engagement and Participation
- Promote Awareness and
- Communicate Government Programmes

Components of Digital Forums.

The South Africa constitution provides three categories of municipalities. There are 278 municipalities in SA, comprising of

- eight (8) metropolitans and
- forty-four (44) district municipalities and
- 226 local government municipalities.

They are all responsible and focused on growing local economies and providing infrastructure and services.

JetCon has established Digital Forum structures as follows:

- Nationally 51 Regional Digital Forums which are composed/consist of 4392 Ward Based Digital Forums
- Each Region has 86 members representing 86 Ward Based Digital Forums.
- JetCon maximum period to engage with all Regions is two (2) months
- Reaching 4,4 million citizens in one day.

Background



Call Termination Reforms in South Africa

- When termination rates began in 1994, The Authority, in a way, concluded that the asymmetry structure of termination needed to be in favour of new mobile entrants at the time.
- The logic was very clear that Telkom was the dominant monopoly telecommunications provider in the country. Telkom had no competition and, therefore, the intention was to bring competition into the market.
- This is when Vodacom and MTN were licensed as mobile operators.
- The new structure then, enabled competition in the market because mobile growth and mobile penetration grew from there, which meant there was sufficient cash for mobile network operators to be able to invest in the network as well as coverage, with Telkom shouldering the burden of that entry into the market.
- When ICASA introduced the first call termination regulations on 1 March 2011, ICASA stated that the high termination rates were necessary to allow substantial investment in the mobile networks. This was done so that Vodacom and MTN could achieve their rollout obligations of providing coverage to over 90% of the South African population.
- This regime also supported the development of greater data services, a critical necessity in the development of a knowledge economy.

Telecoms Reform in South Africa



Telecomms in SA (pre 1990)

- The Post Office Act, 1958
- Government PTT - South African Posts and Telecommunications (SAPT)
- PMG – Post-Master General, subject to minister
- Telecomms:
 - fixed line monopoly, full exclusivity (voice, CPE...), pre mobile, pre Internet
 - Apartheid disparities. Teledensity (1978): white = 71,5%, rural African = 1,8%
 - PABX & VANS liberalised (1980s)

Early Telecomms Reform

- De Villiers report (1989)
 - described Telkom as: debt-ridden, bureaucracy, “goldplating”, privatisation potential
- Posts and telecommunications separated (1991)
- Telkom corporatized (1991)
- Coopers & Lybrandt report (1992)
 - recommended: separation of regulation, local competition + long-distance / international exclusivity, rollout obligations
- CODESA – included broadcasting & telecoms
- Interim constitution (1993)
- Mobile licences – Vodacom & MTN (1993)
 - Highly contested, ANC threat to revoke, BEE compromise

Telecoms Reform in South Africa



Telecommunications Act (No 103 of 1996 - now repealed)

Objects of the Telecomms Act

- Promote universal and affordable provision of services
- Promote economic growth & development through wide range of services
- Encourage investment & innovation and Ensure fair competition
- Needs of local communities, disabled and Protect users and consumers
- Compliance with technical standards
- Stability and Empowerment of historically disadvantaged groups
- HR development, Promote SMMEs and Women's empowerment
- Efficiency in the radio spectrum
- Convergence (2001) and Bridge the digital divide (2001)
- Features of the final Act (closer to White Paper):
 - Telkom partially privatised (SBC 18%, Telekom Malaysia 12% = \$1,5 bn)
 - Sector regulator – SATRA (established 1997)
 - Universal Service Agency (USA) & Universal Service Fund
 - Radio spectrum: band planning, frequency allocation & assignment
 - PSTS – Telkom licensed - 5/6 years exclusivity with rollout targets (2,69 million lines, villages, priority customers)
 - Mobile cellular - duopoly confirmed, provision for 3rd licensee
 - VANS (value-added network services) & PTN – competition with restrictions
 - CPE deregulated
 - Provision for ministerial determinations and policy directives

Key Components of ICT Legislators Framework

- SA Constitution (1996)
- Promotion of Administrative Justice Act (2000)
- Competition Act (1998, as amended)
- Telecommunications Act (1996, as amended)
- Independent Broadcasting Authority Act (1993)
- Sentech Act (1996)
- Broadcasting Act (1999)
- Independent Communications Authority of South Africa Act (2000)
- Electronic Communications and Transactions Act (2002)
- Regulation of Interception of Communications and Provision of Communication-related Information Act (2002)
- Draft Convergence Bill (2004)
- Electronic Communications Act (2005)
- ICASA Amendment Act (2006)

Telecoms Reform in South Africa



South Africa 2006: Telecoms sector performance

- Sector dramatically transformed from R7 billion in 1992 to R50 billion in 2001 representing a jump in contribution to GDP from below 2% to just over 5%.
- Total number of phone subscribers 5 million (50% residential) in 1996 to 37 million in 2006 – 87% mobile. 47 million inhabitants
- PSTS exclusivity failed to deliver universal service - more adequately fulfilled by mobile
- GDP - \$ 200 billion and GDP / capita - \$ 4 23, GINI coefficient = 57,8
- 7 million households have TV, 50% TV penetration, 92% radio penetration.
- 6 television stations, 130 radio stations
- Fixed line teledensity = 9,9% and Mobile teledensity = 68,2%
- 2 Fixed line operators, 3 mobile operators
- 3,6 million Internet subscribers, 255 ISPs
- 300 000 broadband subscribers

Highly skewed Services and Infrastructure

- Urban vs rural
- White vs Black

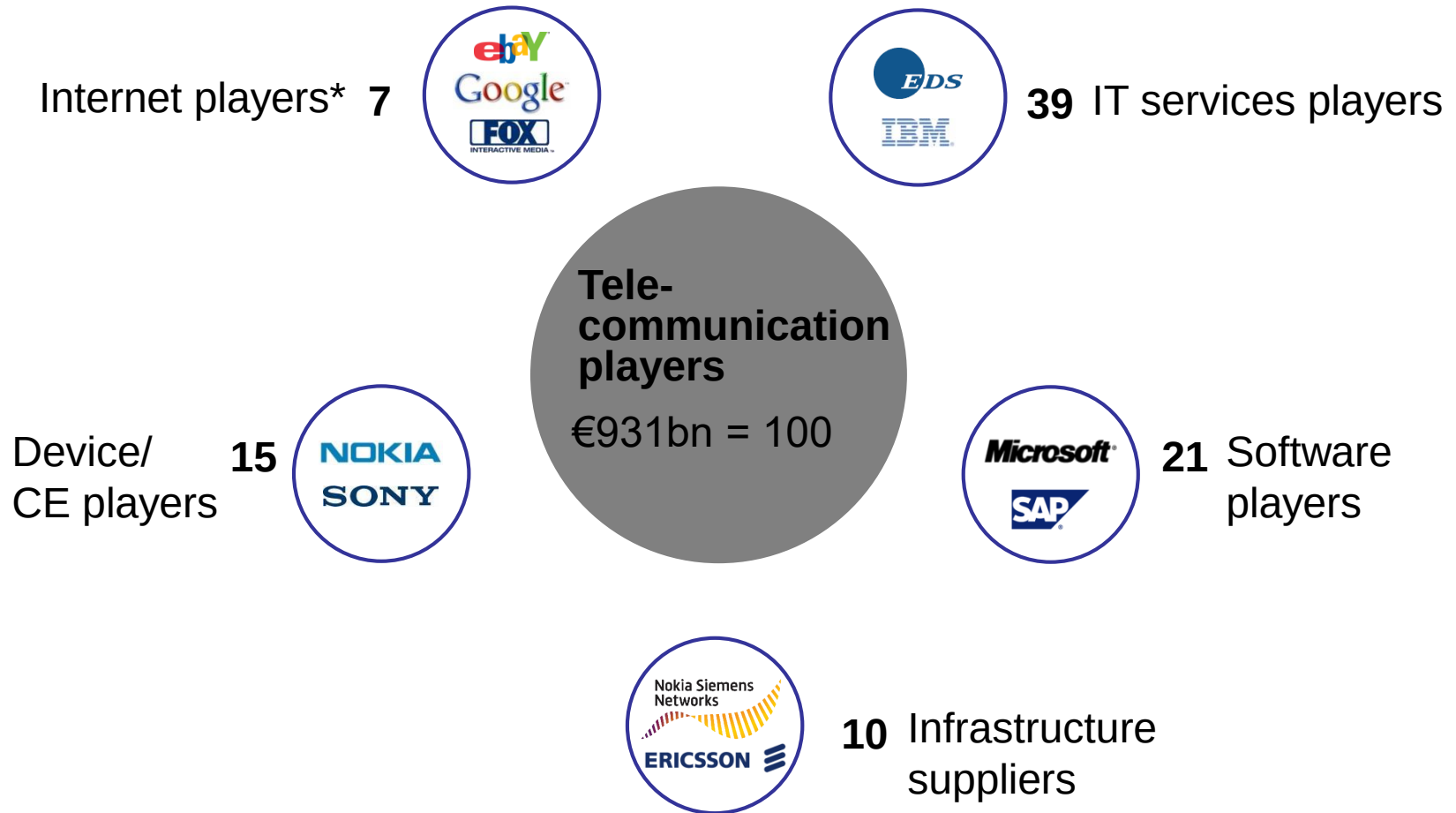
The Telecommunication industry landscape is changing



...

Global industry revenues, 2007

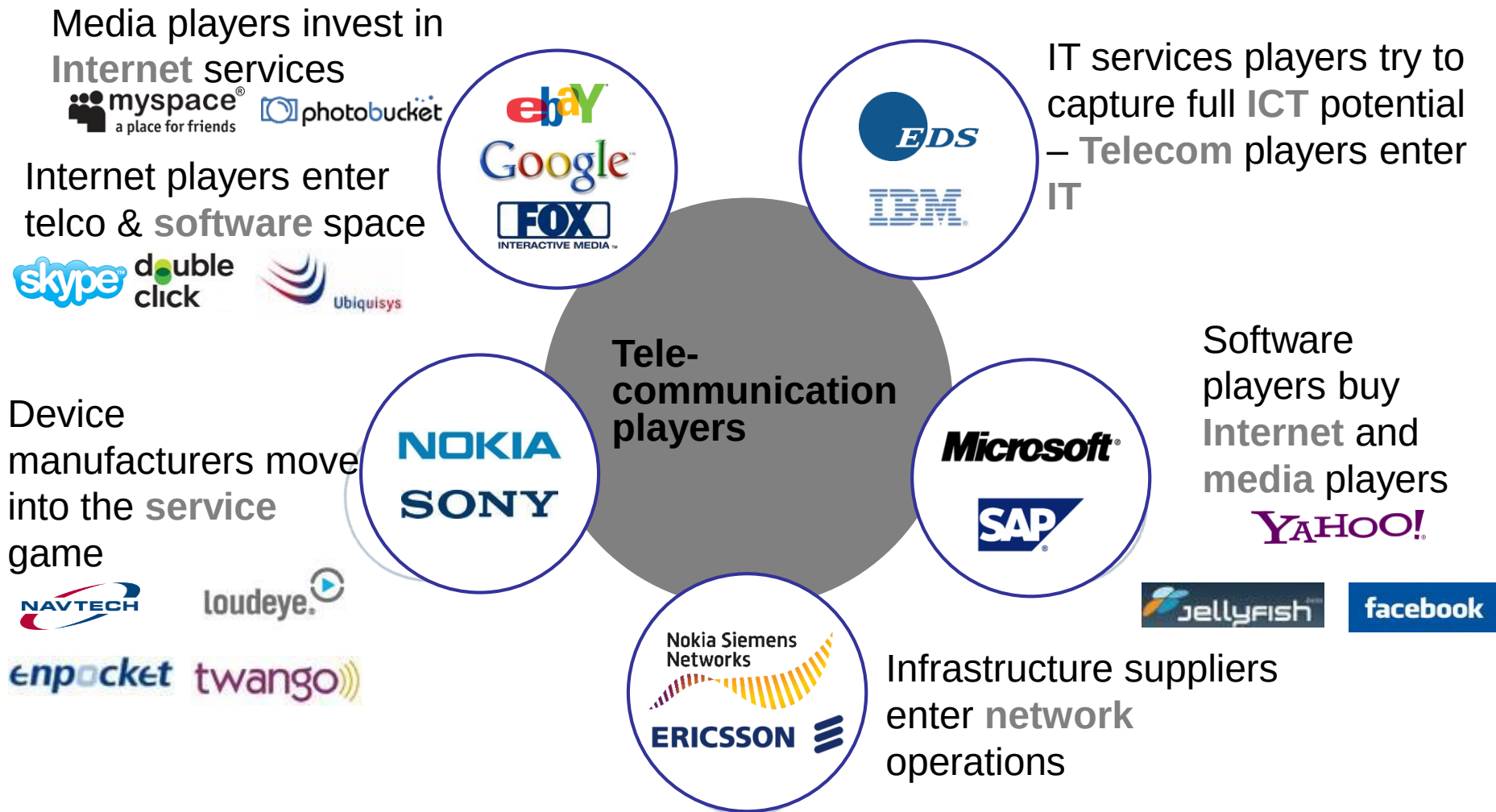
Indexed relative to telecommunication services market



* Internet advertising, content sales, ebay revenues

Source: IDC, Gartner, Strategy Analytics, PWC, company reports

... with strong impact for the 'classic' telecoms world



NPC NDP VISION 2030

CHAPTER 4: ECONOMIC INFRASTRUCTURE



Phasing: Short Term 2012 – 2015: There's a need to review the whole ICT Policy. South Africa to develop more comprehensive and integrated e-Strategy that reflects the cross cutting nature of ICT.

- Achieved in 2017. DTPS completed e-Strategy, e-Government and ICT SMME support strategies.

Phasing: Short Term 2015 – 2020: There shall be 100% broadband penetration. All schools, health facilities and similar social institution will be connected and individual citizen's will have affordable access to information and services, as well as voice communication at appropriate point. Minimum expected broadband speed of 2mega bytes per second from 258Mbts/s.

Phasing: Short Term 2020 – 2030: By 2030, government will make extensive use of ICT to engage and provide services to the citizen. All individuals will enjoy access to wide range of entertainment, information and educational services.

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By 2030, the e-Strategy collaboration between State, industry and academia will also create innovation systems including software and applications incubators, local content and multimedia hubs and research and development network.

Inclusive Digital ICT Development



The other South Africa



- Low access to services (no tar roads, only 2.1% households connected to the grid)
- Low income (less than R600/month per person)
- Low level of education 13% of people with completed matric.

Constrained communications

- - 86.66% of use mobile phones
- - 22% of income in communications
- - People sacrifice on basic food
- - 77 min calling time/month (40% of time without airtime)
- - 22% of Internet users (25-30MB/month)

Source: Zenzele Network Rural project at Eastern Cape





“Do it by ourselves”

- Zenzeleni Networks Ltd is a locally-owned, not-for profit ICT cooperative,
- Registered with the Department of Trade & Industry (DTI)
- Fully Licensed by ICASA

Purpose

- Reduce the Cost to Communicate
- Promotes Local content
- Provides Digital Skills
- ... Community-owned networks?

which is providing

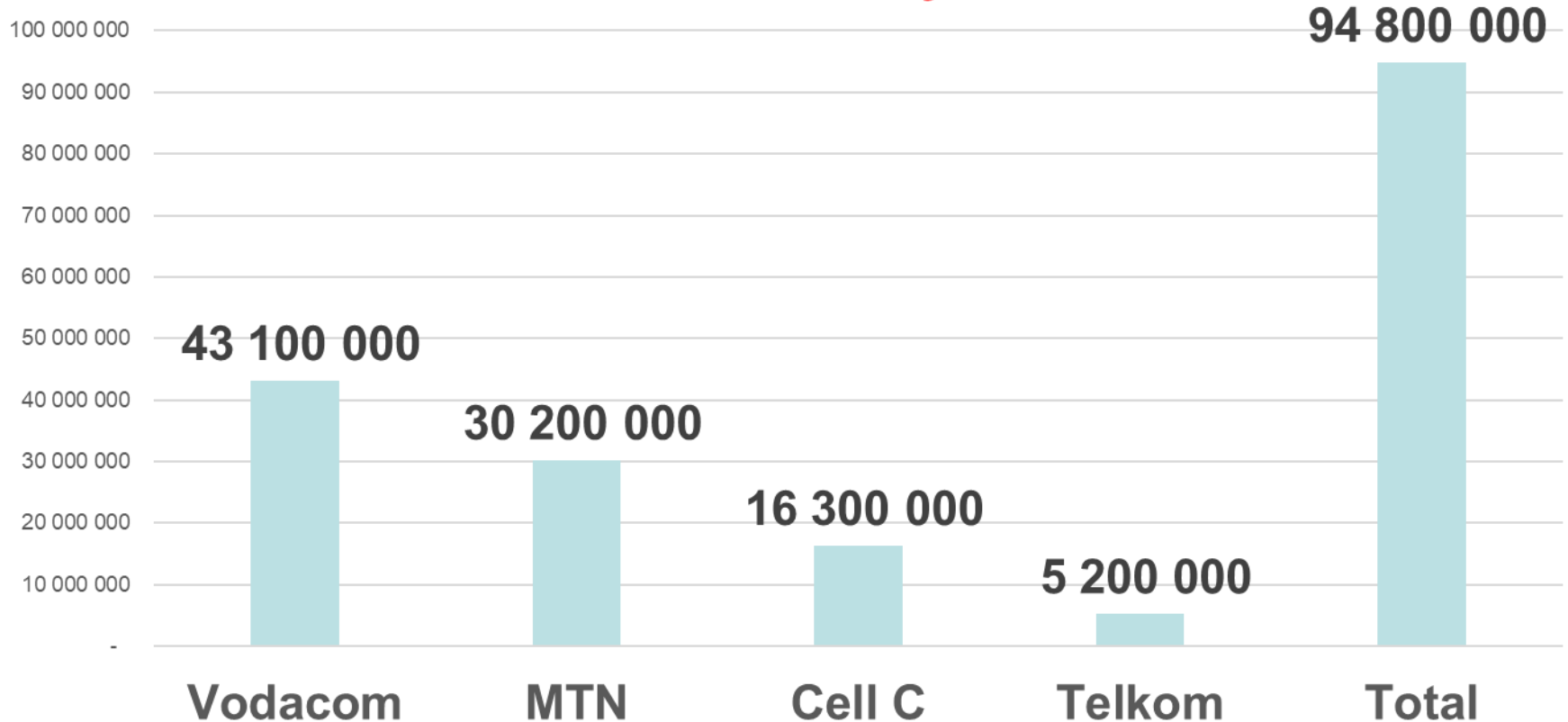
- free internal calls and access to the local primary school, high school, users and business in the community and
- discounted rates to call mobile phones and landlines from a set of public phones spread in the community
- It connected via a network of WiFi access points.
- Provides GSM Cell phones charging stations deployed in the community



South African mobile market share: 2018.



Active subscribers in millions by end of March 2018



Mobile subscribers in SA

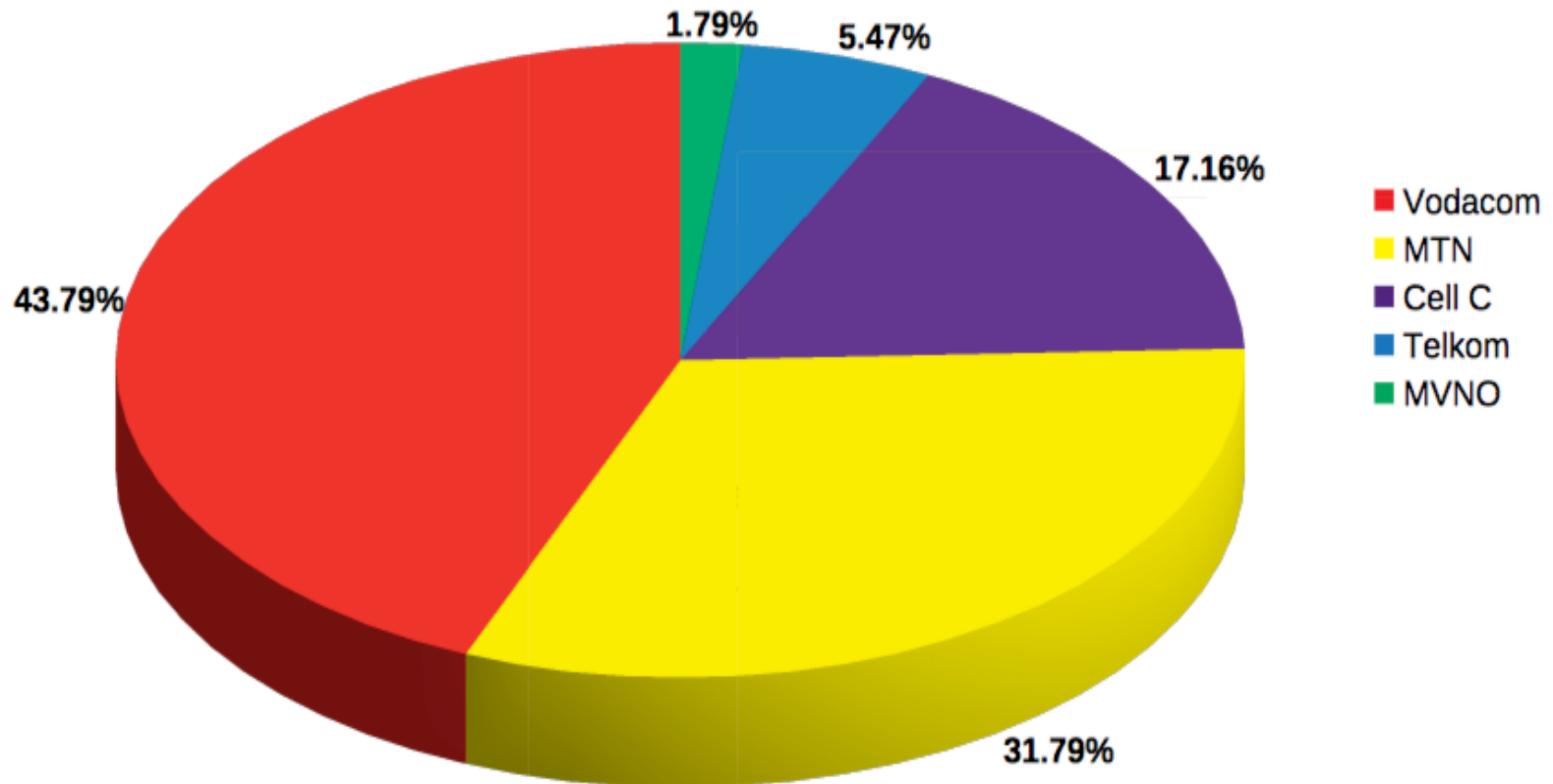
1. Vodacom's latest trading update showed it has 43.1 million mobile users in South Africa.
2. Cell C's results for the year ended 31 December 2017 reflect 16.3 million South African customers.
3. Telkom's results for the year ended 31 March 2018 showed active mobile subscriber of 5.2 million.
4. Following MTN's latest results 30,2 million mobile subscriber numbers.

South African mobile market share: 2018.



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Mobile subscriber market share
Reported, 2018



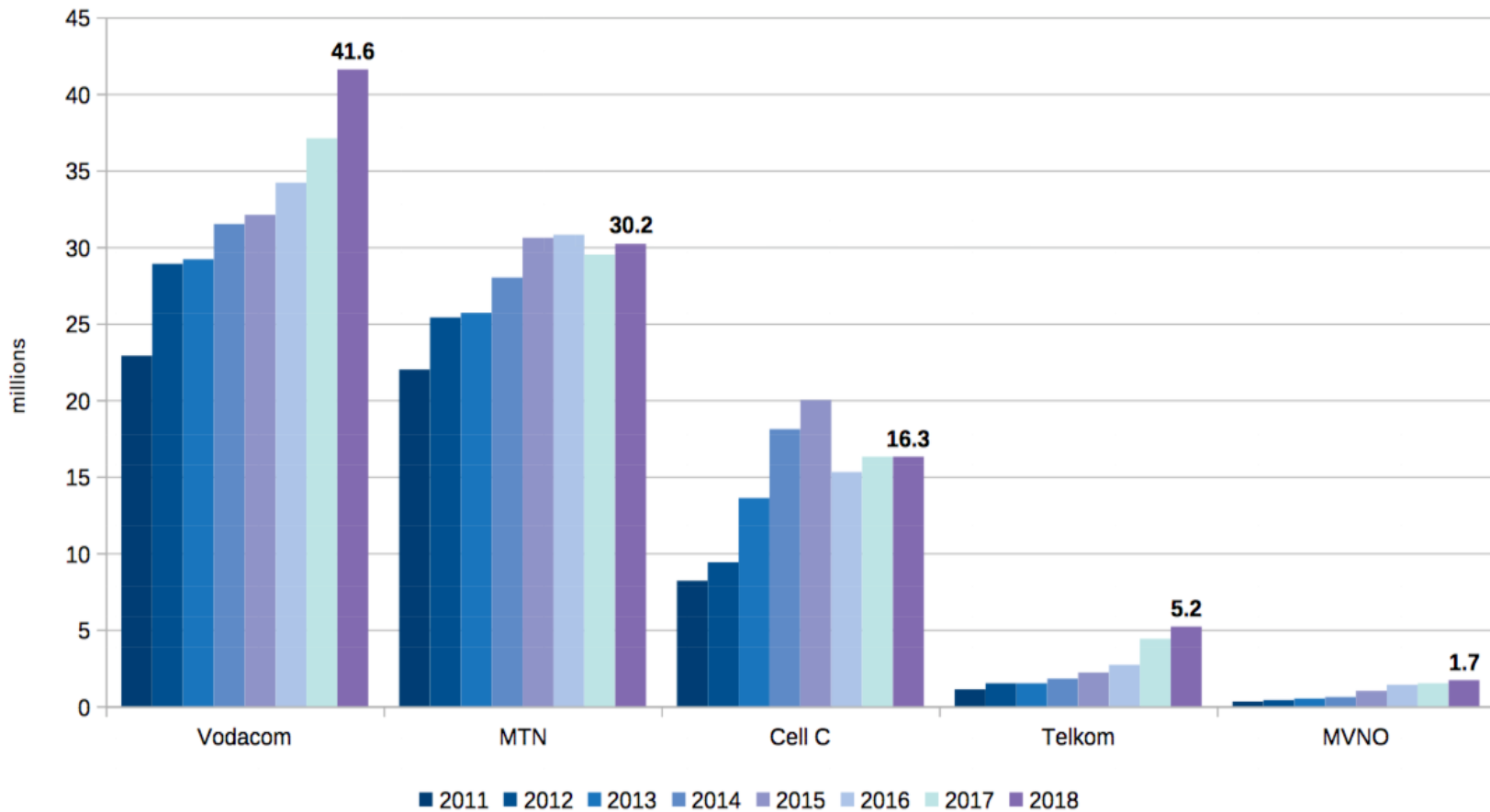
Source: Techcentral dated 21 August 2018 (techcentral.co.za)

South African mobile market share: 2018.



South African mobile subscribers

Reported, 2011 - 2018

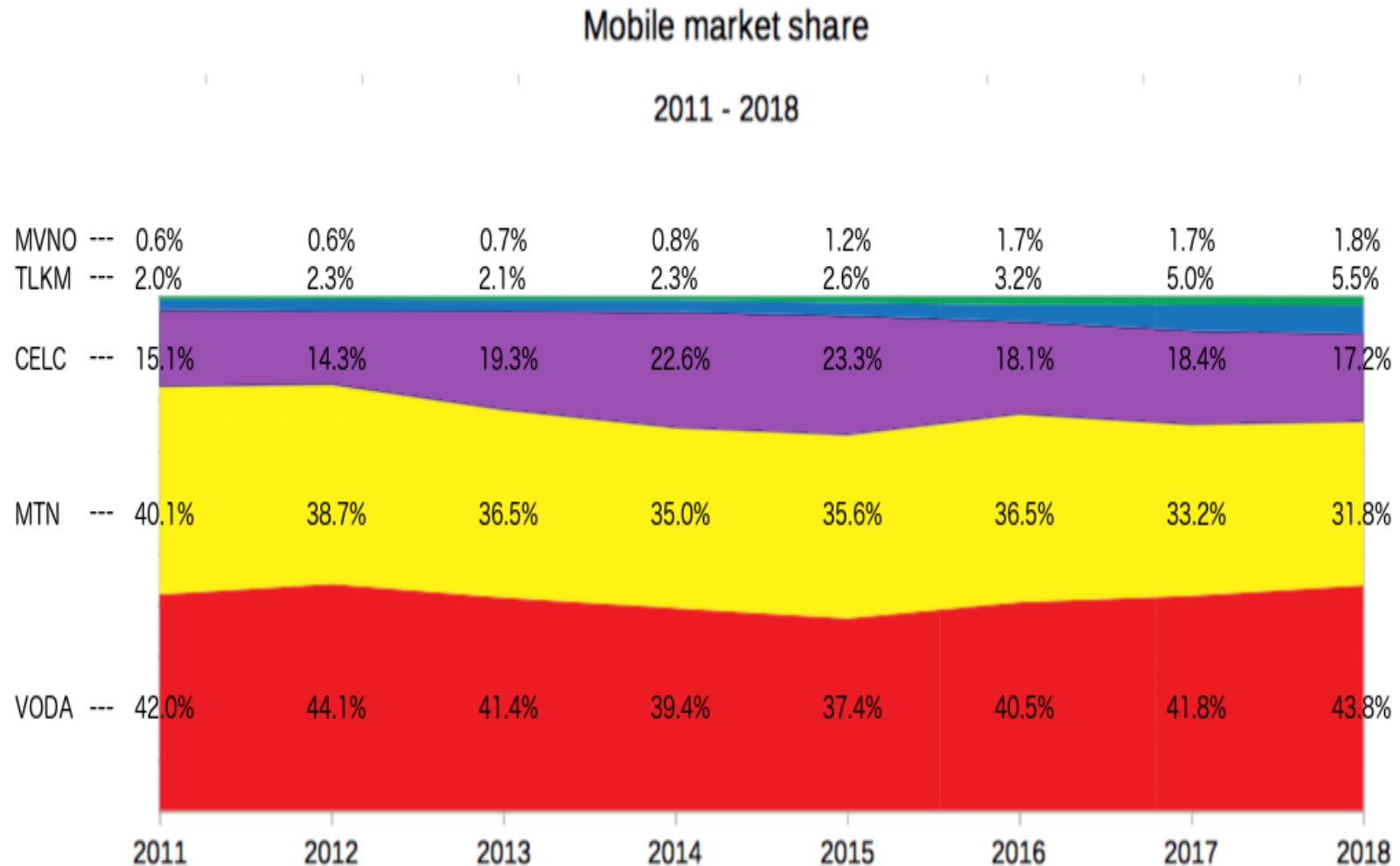


Source: Techcentral dated 21 August 2018 (techcentral.co.za)

South African mobile market share: 2018.

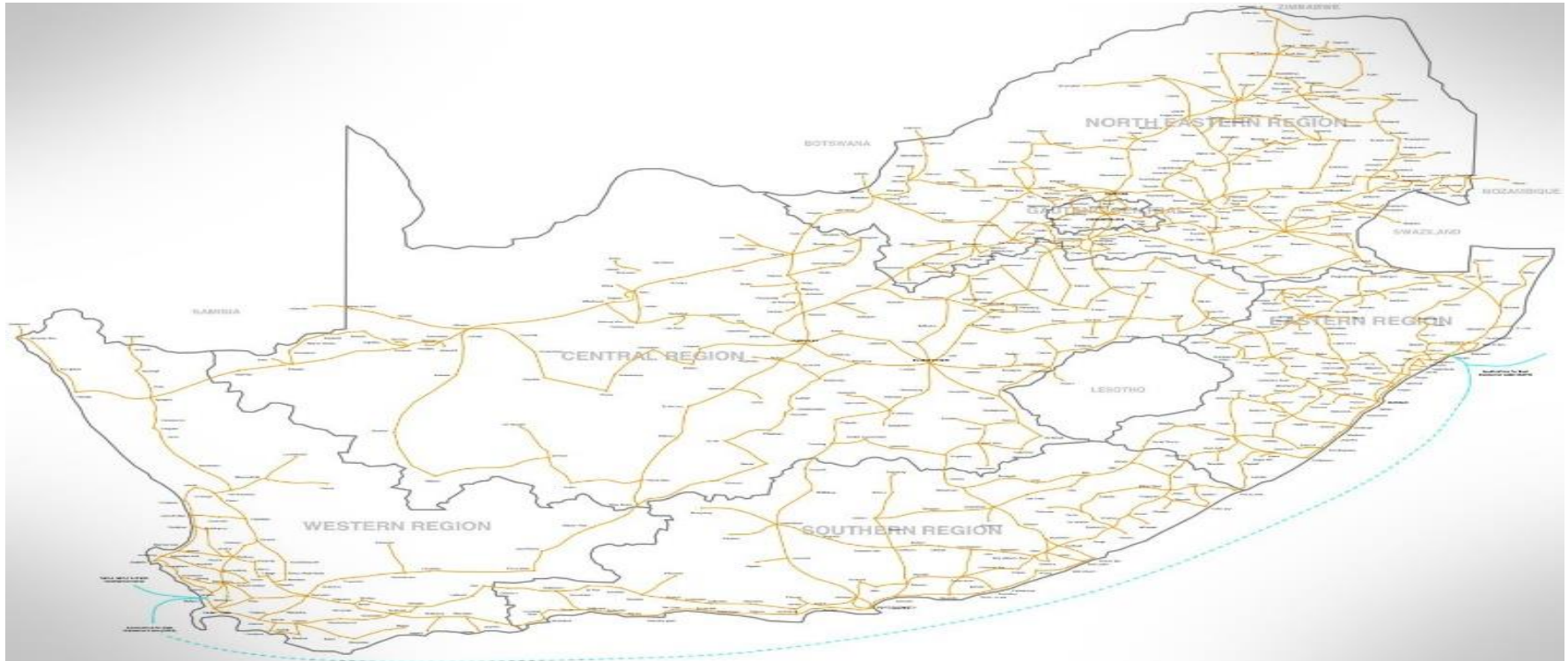


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Source: Techcentral dated 21 August 2018 (techcentral.co.za)

South African Copper/Fibre Networks: 2018

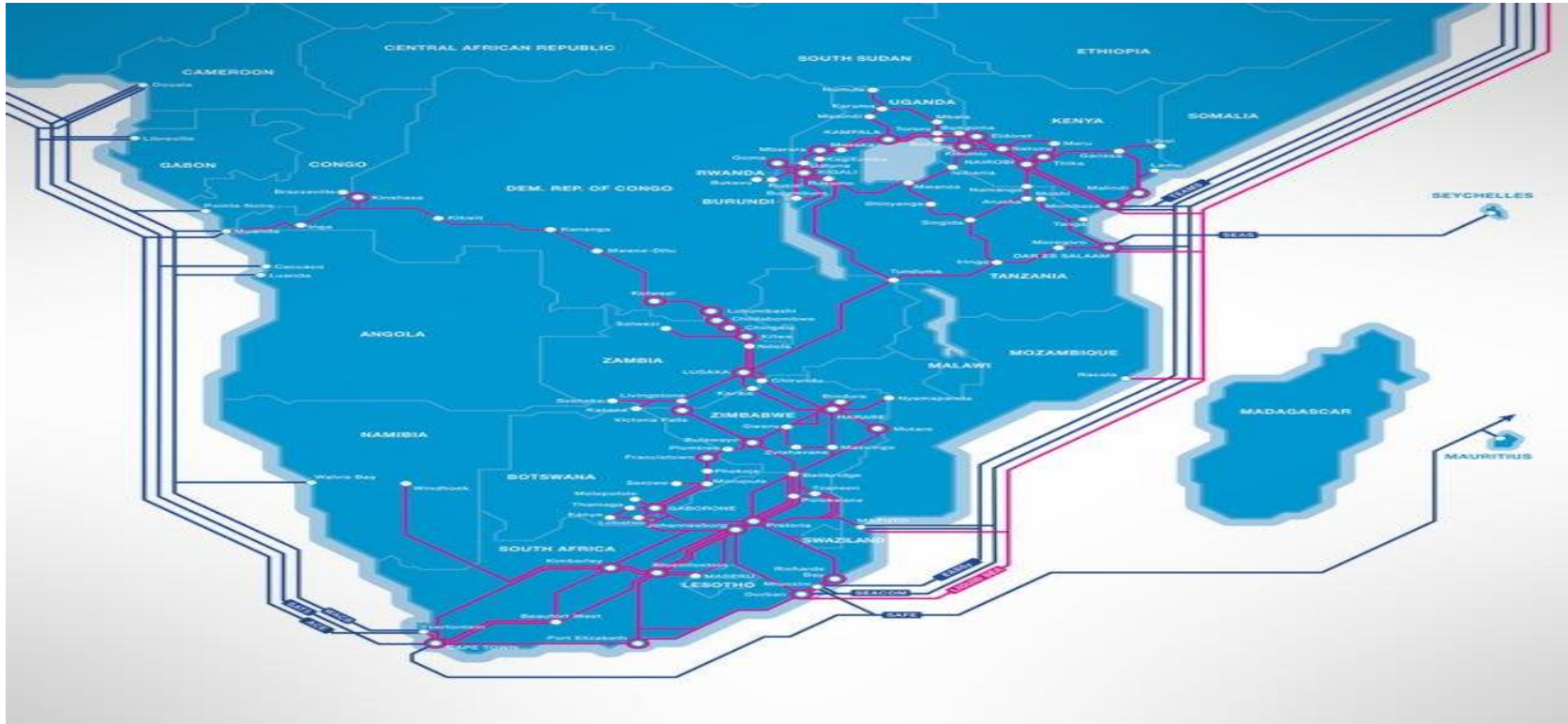


Telkom South Africa

Telkom recently revealed that it has rolled out more than 157,400 kilometres of fibre in South Africa.

The company said its network connects over 2.5 million premises, and that it plans to continue investing to improve its infrastructure.

South African Copper/Fibre Networks: 2018



Liquid Telecoms

Liquid Telecom's African network spans over 50,000km across borders, and includes The East Africa Fibre Ring. Liquid Telecom's linear network route in South Africa is over 16,000km.

In July 2018, Liquid Telecom signed an agreement with Telecom Egypt to complete construction of a terrestrial fibre network from Cape Town to Cairo.

South African Copper/Fibre Networks: 2018



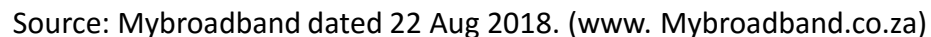
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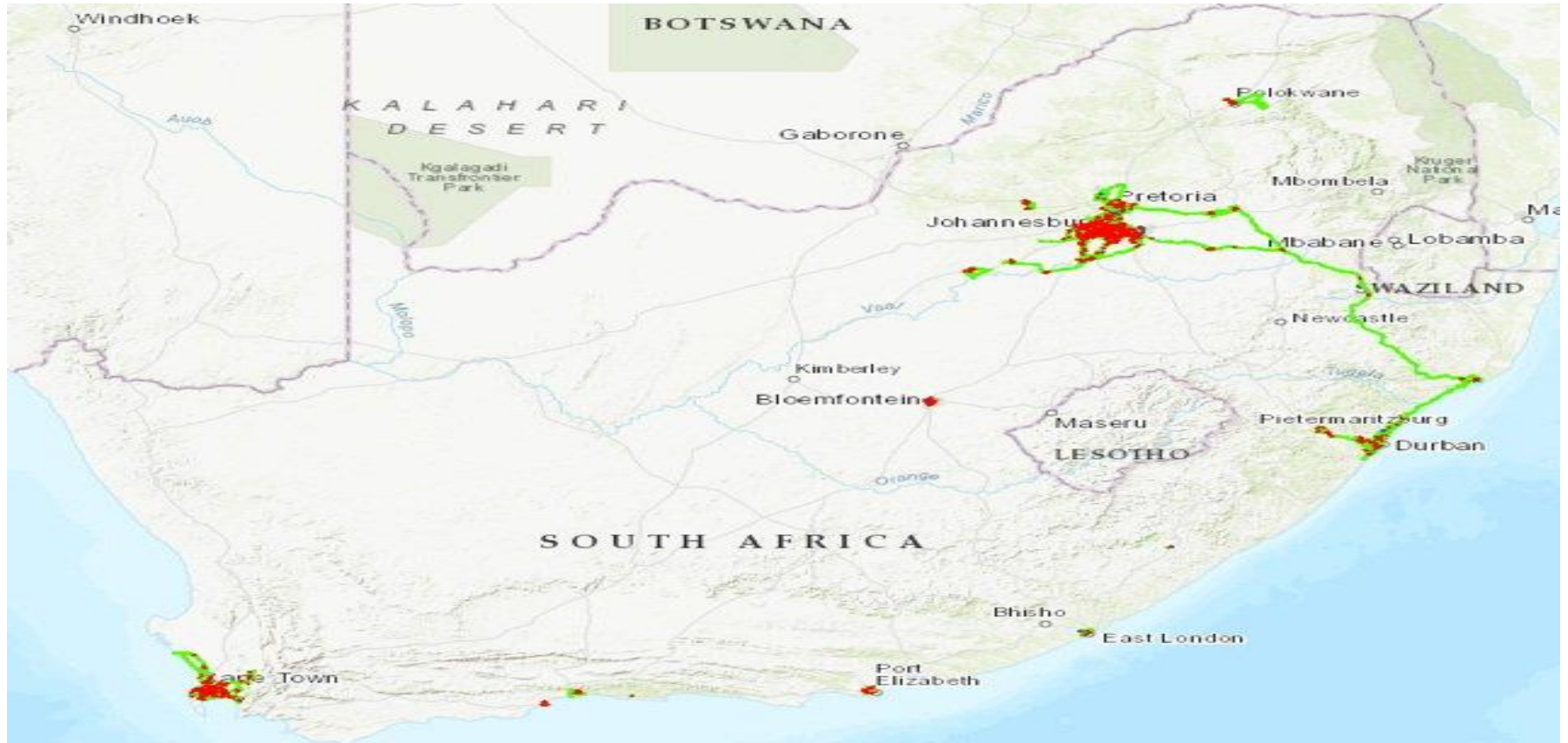
Broadband Infraco

State-owned enterprise Broadband Infraco has around 15,000km of fibre in the ground.

Source: Mybroadband dated 22 Aug 2018. ([www. Mybroadband.co.za](http://www.Mybroadband.co.za))



South African Copper/Fibre Networks: 2018



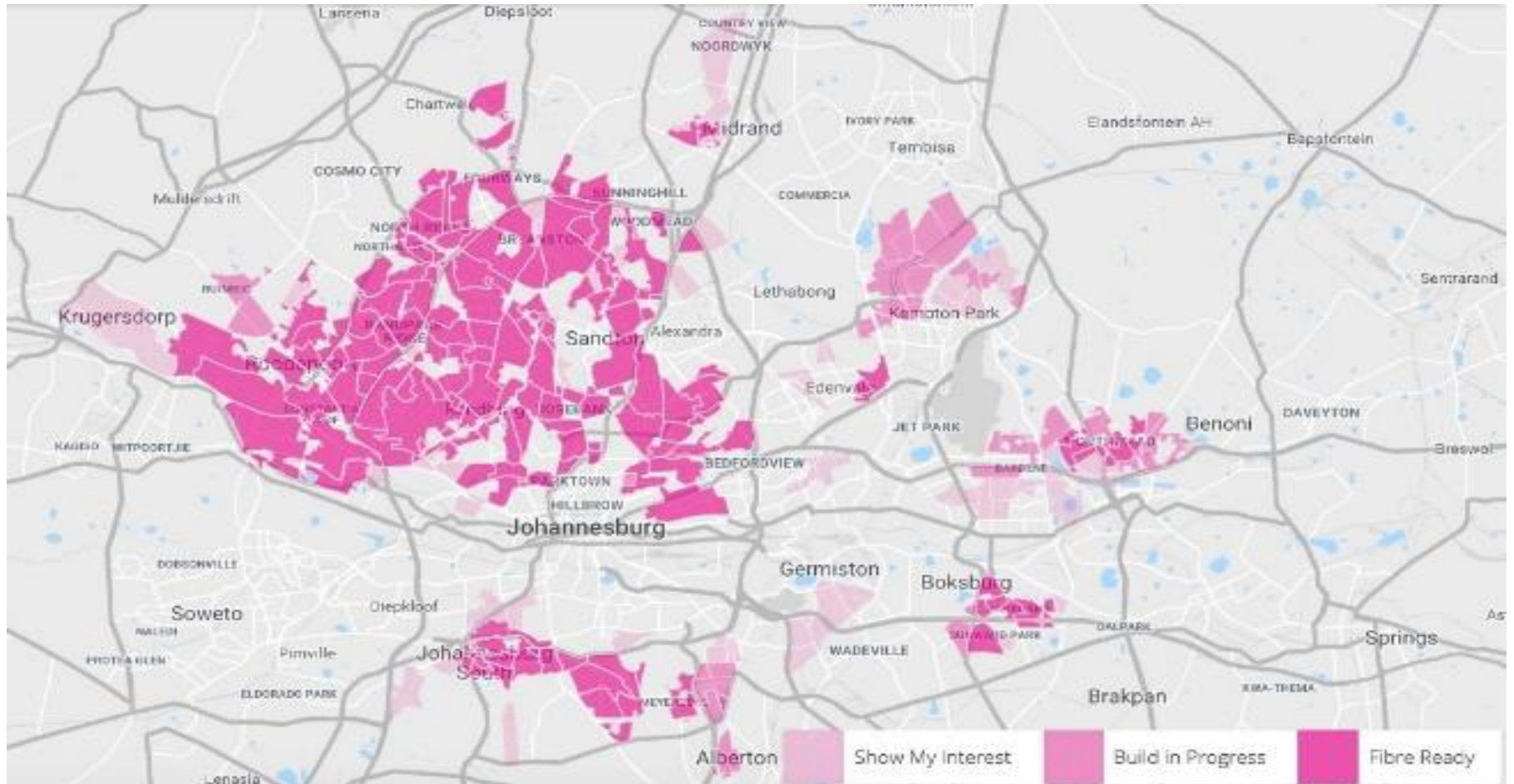
Dark Fibre Africa

Dark Fibre Africa has around 13,000km of fibre in the ground.

It is owned by Community Investment Ventures Holdings, a venture holding firm owned by a group of investors – Remgro, New GX Capital Holdings, Chlanich, Community Investment Holdings, and Consolidated Capital Investments.

Source: Mybroadband dated 22 Aug 2018. ([www. Mybroadband.co.za](http://www.Mybroadband.co.za))

South African Copper/Fibre Networks: 2018



Vumatel

Vumatel was recently acquired by CIVH and has over 8,000km of fibre in the ground in the Johannesburg, Cape Town, and Durban areas.



How criminals are wrecking South Africa's telecoms networks

- South Africa is battling high crime rates, and the country's telecommunications networks are not immune to the mess criminals are creating.
- Criminals in South Africa are causing millions of rands of damage to telecommunications networks through copper theft, stealing batteries from cellular towers, and even stealing fibre to make certain products.



How criminals are wrecking South Africa's telecoms networks

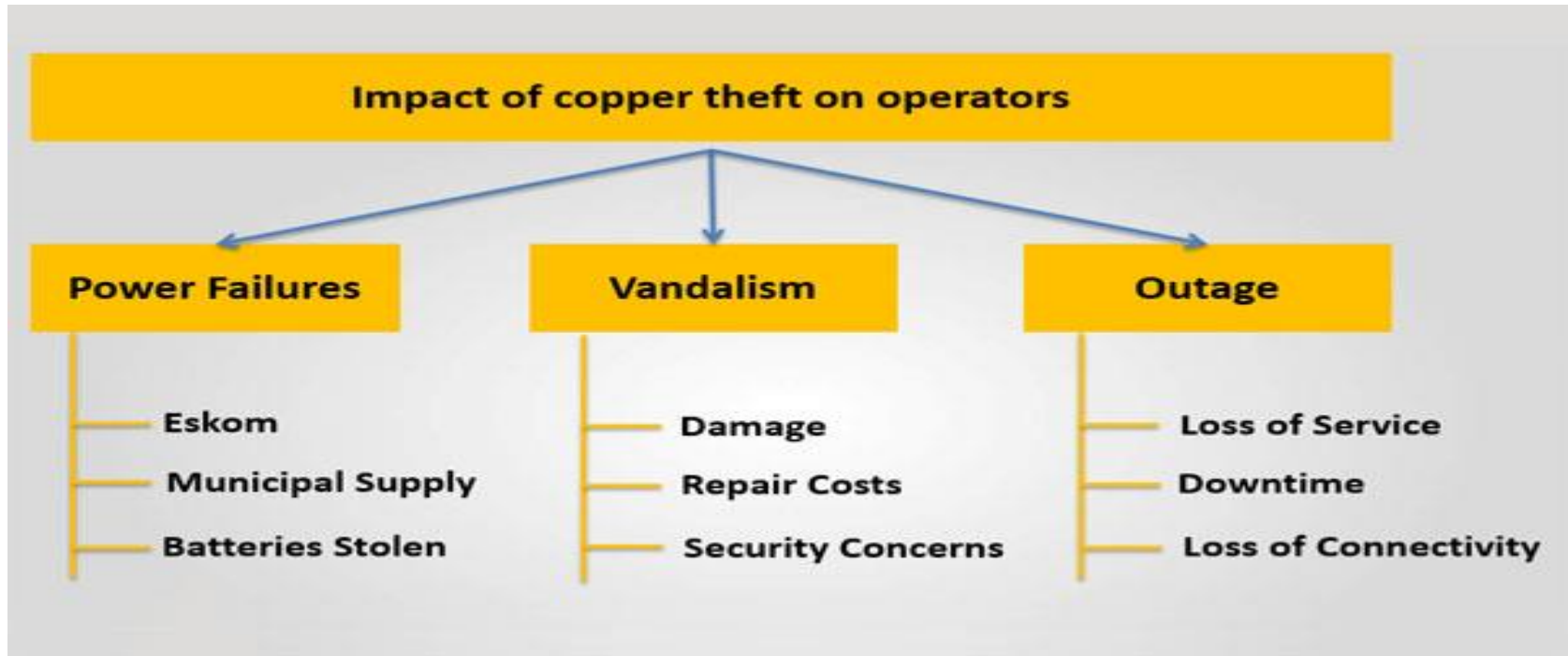
- The cost of these criminal acts extends far beyond the network damage. Operators are faced with repair costs, loss of revenue, security costs, an increase in customer complaints, and network quality concerns.
- Consumers are also hit hard. The network damage results in service unavailability, an impact on emergency services, and a significant impact on businesses using the affected networks.

South African Copper/Fibre Networks: 2018



How criminals are wrecking South Africa's telecoms networks

- Telkom's copper network is often the target of criminals, who cause significant damage to Telkom's infrastructure.
- On 19 June 2013, cable thieves cut and removed several main Telkom cables, causing major service disruptions to Telkom services in the Ferndale and Strydom Park, Randburg area. In total, 2,173 business, corporate, and residential customers were affected.



Copper theft and vandalism

- Copper theft and vandalism are some of the biggest problems which Telkom operator face in South Africa.
- Telkom said the cost of cable theft to the company surged from R164 million in 2010 to R247.6 million in 2013.

JETCON`S SUBMISSION ON CALL TERMINATION AMENDMENT REGULATION 2018



JETCON`S ANALYSIS AND CONCERNS

- Criminals in South Africa are causing millions of Rands of damage to telecommunications networks through copper theft.
- We are of the view that Telkom lacks visionary innovation in developing clear fixed line strategies and how to improve profitability of its majority exchanges. Still operates in silos Telkom fixed and Mobile.
- In SA there are more than 400 ECNS and ECS licensee holders which are not visible in the market.
- JetCon`s view is that ICASA`s proposal/decision to reduce fixed termination rates at a faster pace than the reduction in mobile termination rates would entrench the duopoly of the largest mobile operators and reduce competition.
- JetCon notes, the fact that we have two dominant players in the market, who enjoys a less aggressive decline in their mobile termination rates while the smallest of the players have had to shoulder a much more aggressive reduction in termination rates.
- The proposed fixed termination rates as proposed by ICASA might not have recognised that the telecoms landscape has changed to such an extent that there is one converged voice market, rather than separate fixed and mobile markets.
- The lasting impact of these decisions could well be working against ICASA`s objectives to promote competition and continue to reduce the cost to communicate for South African telecoms users.
- We also noted that, Cabinet has approved an amended version of the Electronic Communications Amendment Bill.

JETCON`S SUBMISSION ON CALL TERMINATION AMENDMENT REGULATION 2018



We hereby submit our proposal. As indicated below:

JetCon supports ICASA`s proposal as follows:

- We support Amendment of Regulation 1 of the Regulation.
 - We support Repeal of Regulations 3, 4, 5 and 6 of the Regulations
 - We support Substitutions of Regulation 7 of the Regulation, we also propose and submit that the termination rates are amended as follows below:
-
- PRO-COMPETITIVE TERMS AND CONDITIONS

Price Control: Cost-based pricing:

For the period 01 October 2018 to 30 September 2020, a licensee identified in sub-regulation (4) must charge wholesale voice call termination rates to a mobile or fixed location as specified in Table 1:

Table 1: Termination Rates:

	Termination Rate to a mobile location	Termination Rate to a Fixed location
1 October 2018 to 30 September 2019	R 0.12	R 0.10
1 October 2019 to 30 September 2020	R 0.10	R 0.10
1 October 2020	R 0.09	R 0.10

JETCON`S SUBMISSION ON CALL TERMINATION AMENDMENT REGULATION 2018



We hereby submit our proposal. As indicated below:

JetCon supports ICASA`s proposal as follows:

- We support Substitution of Regulation 8 of the Regulation
- We support Short Title and Commencement
- We support Substitutions of Annexure A and B of the Regulation, we also propose and submit that the termination rates are amended as follows below:

Annexure A:

3. A licensee entitled under paragraph 2 to charge a higher rate may charge a maximum rate according to the following tables:

JETCON`S SUBMISSION ON CALL TERMINATION AMENDMENT REGULATION 2018



We hereby submit our proposal. As indicated below:

JetCon supports ICASA`s proposal as follows:

Table A1: Maximum rate for termination to a mobile location

	Termination rate
1 October 2018 to 30 September 2019	R 0.17
1 October 2019 to 30 September 2020	R 0.15
1 October 2020	R 0.13

Table A2: Maximum rate for termination to a fixed location

	Termination rate
1 October 2018 to 30 September 2019	R 0.12
1 October 2019 to 30 September 2020	R 0.12
1 October 2020	R 0.12

JETCON`S SUBMISSION ON CALL TERMINATION AMENDMENT REGULATION 2018



JETCON`S RECOMMENDATION

- ICASA must protect Telkom SA`s revenues in order for them to be able to continue to maintain their constantly vandalised national infrastructure which Operators are faced with repair costs, loss of revenue, security costs, an increase in customer complaints, and network quality concerns.
- JetCon`s submission gives Telkom sometime to speedup their phaseout project. Telkom is expected to phase out almost all its copper based network by 2020 (to LTE4G/Fibre) as announced by Telkom GCEO during their March 2018 annual results announcement.
- This means that Vodacom and MTN to continue to pay higher rates to connect callers from their networks to subscribers on Cell C, Telkom`s mobile and other small networks.
- JetCon firmly believes and suggest that ICASA should maintain higher levels of call tariff asymmetry between small network operators and larger ones, while further conducting its review of South Africa`s telecommunication market.

CONCLUSION



- Jethro Consulting Solutions (“JetCon”) thanks the Independent Communications Authority of South Africa (“ICASA”) for the opportunity to participate in the ICASA’s Draft Call Termination Amendment Regulation 2018.
- As the Republic of South Africa’s stakeholders deliberates on ICASA’s draft call termination rate Regulatory Issues, JetCon strongly requests the Authority to focus on resourcing and strengthening ordinary community participation in all processes of regulations.
- The Authority to also address both the concerns raised by Stakeholders within the ICT sector so that they can urgently conclude all outstanding activities needed so that ICT operators can continue to build the modern ICT Infrastructures especially in rural areas and deliver the services that will fuel South Africa’s growth in all key national development domains, as outlined and specified in all South Africa’s development plans, including the overriding NDP and the subordinate ICT related policies and regulatory provisions.

“The importance of a message is not what you say, is how you say”

- “With Convergence of ICT “Digital divide” will be eradicated through “digital inclusion” as the world “go digital” to participate in the “digital age”.

» **OR**

- “With Convergence of ICT has compelled the world to “go digital” as we live in a “digital age”, were “digital divide” still exists and can be eradicated through “digital inclusion”.

Ke a leboga

Dankie

Ngiyathokoza

Ke a leboha

Thank you

Siyabonga

Ngiyabonga

Inkomu

Ndo livhuwa

Enkosi

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