

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NO. 3219

23 May 2025



**SUMMARY OF THE FINDING DOCUMENT ON THE INQUIRY INTO THE EFFECTS OF
LOAD SHEDDING IN THE ELECTRONIC COMMUNICATIONS AND BROADCASTING
SECTOR**

1. On 1 December 2023, the Independent Communications Authority of South Africa ("the Authority") published a Notice of intention to conduct an Inquiry on the effects of loadshedding and the regulatory relief measures the Authority may consider as it seeks ways to alleviate the impact of loadshedding in the Electronic Communications, Broadcasting, and Postal Sectors in Government Gazette No. 49795 under Notice No. 4139 of 2023 (the Inquiry).
2. The purpose of the inquiry was to solicit views and inputs from interested stakeholders on the impact of loadshedding and the regulatory relief measures the Authority may consider in seeking to alleviate the impact of loadshedding in the electronic communications, broadcasting, and postal services sectors during the various stages of loadshedding.
3. The Authority hereby publish the notice regarding the conclusion of the inquiry in terms of section 4C (6) of the ICASA Act.
4. A copy of the longer version of the findings document will be made available on the Authority's website at <https://www.icasa.org.za> and at the Authority head office library (Block C, 350 Witch-Hazel Avenue, Eco Point Office Park, Eco Park, Centurion) during office hours (09h00 and 16h00, Monday to Friday).

A handwritten signature in black ink, appearing to read 'M. Ramusi', written over a horizontal line.

Mothibi G. Ramusi
ICASA Chairperson
Date: 07/04/2025

ACKNOWLEDGEMENTS

The Authority received twenty-eight (28) written submissions in relation to the Inquiry from the following interested stakeholders:

1. ACT
2. RAIN
3. SABC
4. BitCo Telecoms
5. Cube ICT
6. Edelnet
7. Primedia
8. Vodacom
9. SACF
- 10.eMedia
- 11.Blue Shadow Investments (Pty) Ltd
- 12.Extim (Pty) Ltd
- 13.Fine Music Radio
- 14.NEXUS NET WIRED & WIRELESS
- 15.Simigenix (Pty) Ltd
- 16.Smile FM
- 17.Voice of Cape Town
- 18.Globecast
- 19.Kagiso Media
- 20.Vumatel
- 21.Liquid Intelligent Technologies
- 22.MultiChoice
- 23.Telkom
- 24.Radio Pulpit
- 25.Sentech
- 26.Lasernet
- 27.MTN
- 28.Community Monitoring Service.

The Authority takes this opportunity to thank and appreciate the representations made by interested parties.

INTRODUCTION

The Purpose of the Inquiry

The purpose of the Inquiry was to solicit views and inputs from interested stakeholders on the impact of loadshedding and the regulatory relief measures the Authority should consider alleviating the impact thereof in the electronic communications, broadcasting, and postal sectors during the various stages of loadshedding.

The Inquiry was in the form of a questionnaire wherein interested stakeholders were required to answer a series of questions within forty-five (45) days from the date of publication of the notice in the Government Gazette.

This Findings document consists of three sections:

- Section A: Outline of the process followed by the Authority.
- Section B: Submissions received from interested parties and the Authority Findings.
- Section C: Conclusion

SECTION A: OUTLINE OF THE PROCESS FOLLOWED BY THE AUTHORITY

2.1. On 01 December 2023, the Authority issued a notice of Inquiry which was published in Government Gazette No. 49795 under Notice 4139 of 2023. The notice was issued in terms of section 4B of the ICASA Act. The purpose of the Inquiry was to solicit views and inputs from interested stakeholders on the impact of loadshedding and the regulatory relief measures the Authority could consider alleviating the impact thereof in the electronic communications, broadcasting, and postal sectors during the various stages of loadshedding.

2.2. The Inquiry was in the form of a questionnaire wherein interested stakeholders were required to answer a series of questions within forty-five (45) days from the date of publication of the notice in the Government Gazette.

2.3. The Authority received twenty-eight (28) written submissions in response to the Inquiry notice.

SECTION B: SUBMISSIONS RECEIVED FROM INTERESTED PARTIES AND THE AUTHORITY FINDINGS

3.1. (Question 1) Describe the impact loadshedding is having on your business and provide substantive reasoning around the following areas: economic, infrastructure, social and consumer impact from 5 April 2023 to the date this notice was published.

3.2.1. The Authority findings:

The Authority found that stakeholders did experience similar negative impacts due to the effects of loadshedding in that loadshedding significantly impacted the ICT sector through disruptions to their operations, increasing costs and damaging their customer's trust.

Loadshedding caused ICT sector businesses to experience frequent disruptions in their operations. Without a stable power supply, businesses such as telephone companies, internet service providers, radio stations and other broadcasters were unable to function optimally. This leads to:

- Downtimes: Frequent power outages did result in extended periods of downtime, leading to a significant loss of productivity and revenue.
- Network Congestion: When the power is restored, network congestion occurs as all devices and systems simultaneously come back online, causing further delays and disruptions.
- Revenue Loss: Communication sector businesses indicated that a lot of revenue was lost due to downtime, reduced productivity, and the inability to provide services to customers.
- Increased Expenses: Businesses stated that they did incur additional costs to mitigate the effects of loadshedding, such as investing in backup power systems, generators, and fuel.

Loadshedding further affects the customer experience, leading to:

- Frustration: Frequent disruptions to communication services cause frustration among customers, leading to a loss of trust and loyalty.

- **Decreased Satisfaction:** The unavailability of services during loadshedding periods negatively impacts customer satisfaction, affecting businesses' bottom lines.

The Authority notes that the stakeholders share similar negative impacts because of loadshedding. The cumulative effect of loadshedding had long-term consequences for communication sector businesses.

3.2. (Question 2) Quantify the severity of the impact of loadshedding in terms of the loadshedding stages

3.2.1. The Authority findings:

The Authority found that loadshedding effects were experienced differently by stakeholders depending on the various stage(s) of loadshedding. Whilst the majority of stakeholders indicated that all stages of loadshedding affected their business operations, it was interesting to note the response from one stakeholder (i.e. Simigenix) which indicated that it did not generally feel the impact of loadshedding on its operations across different stages as it had sufficient battery back-ups in place which enabled it to operate through the highest loadshedding stages.

In terms of the actual impact per stage of loadshedding, the Authority found that when loadshedding was at stage 1, there was a low impact on the business operations of stakeholders, i.e., stakeholders were able to operate with minimal disruptions.

Between stages 2 and 4, the impact for most stakeholders appeared to be medium to moderate. The stakeholders further indicated that when loadshedding is between stage 2 and 4, the negative effects experienced included, among others:

- An increase in the reliance on backup power systems, which, in turn, resulted in the associated costs of running such systems increasing and thereby putting financial strain on stakeholders' businesses.
- customers and consumers experienced service interruptions /connectivity issues due to batteries not being able to sufficiently recharge.

Beyond stage 4 and upwards, the challenges experienced by stakeholders significantly increased. These challenges include, among others:

- system failures (including generator failures due to excessive running hours),
- severely compromised network availability (which in turn affected quality of service),
- cancellation and/or downgrading of services (such as television subscription) by customers,
- damage to infrastructure, potential job losses and business closures.

The Authority found that loadshedding was unpredictable, and it was often implemented at short notice. Therefore, regardless of the stage(s) of loadshedding being implemented (even during the periods of its suspension, as is currently the case), it was essential for stakeholders to continue taking proactive measures and have monitoring systems in place (to the extent that they can) to mitigate the negative impact of loadshedding on their business continuity. Whilst we are currently in an extended period of suspended loadshedding, there is still load reduction implemented and warnings of loadshedding returning.

3.3. (Question 3) What measures, if any, have you put in place to mitigate the negative impact of loadshedding?

3.3.1. The Authority findings:

The Authority found that licensees have taken a proactive approach aimed at mitigating the impact of loadshedding on customers/end-users. Stakeholders' mitigation strategies underscored the significant impact of loadshedding on their operations, which affected their consumers/end users, revenue streams and operational costs.

The Authority's analysis revealed a multifaceted approach by stakeholders to mitigate the negative impact of loadshedding. The Authority found that licensees were investing and implementing broadly grouped strategies to mitigate the

negative impact of loadshedding, namely: alternative energy investments, backup power solutions, customer engagement, and network optimisation.

Companies such as Vodacom, Kagiso Media and Vumatel considered solar power investments to be a critical business strategy. Reliance on the grid and diesel generators had decreased due to renewable energy sources offered by solar panels. Companies like Telkom and Vodacom have put energy-saving measures into place. These include optimising energy utilisation in base stations and data centres and utilising more energy-efficient network equipment. That helped with loadshedding and advancing long-term sustainability objectives.

Companies such as MTN and Telkom have indicated that they have installed high-efficiency rectifiers and expanded base station battery capacities to guarantee network resilience. During disruptions, the Licensees stated that those steps do aid in keeping the network operational.

To make sure that broadcasting programming is still available during blackouts, companies such as MultiChoice and eMedia have introduced pop-up channels and re-airing techniques. The goal of the strategy is to keep consumers/end users and advertisers interested. Premedia's endeavours to educate viewers and advertisers on utilising different platforms highlight the significance of educating customers to lessen the effects of decreased coverage during loadshedding. The tactic aids in preserving viewer interest on many media channels.

The Authority commends the licensees on the investment made in alternative power. However, the Authority remains concerned with the impact this unplanned investment will have on the end-user's cost to communicate and the commercial sustainability of licensees. The Authority is mindful that these trade-offs will hurt the cost of communicating and bridging the digital divide. The Authority is of the position that there is a need to mitigate the impact on end-users where possible.

The Authority further found that the mitigation strategies implemented by licensees to counter the effects of loadshedding were not sufficient to address the effects of loadshedding but only assisted in mitigating the impact of loadshedding.

3.4. (Question 3.1) Have the measures put in place been effective and sustainable**3.4.1. The Authority findings:**

The Authority found that the implementation of loadshedding has resulted in unreliability and poor service quality in the provision of broadcasting and electronic communication services. On the other hand, service providers that were employed to assist were unable to deploy backup power (generators and batteries) in certain unsafe areas (due to crime), where services were disrupted by loadshedding. In certain circumstances, prolonged and frequent loadshedding caused equipment malfunction and regular maintenance. Subsequently, customer service was impacted, causing customer disappointment and dissatisfaction.

The Authority found that there was a significant impact on customer service during loadshedding even when there were contingency plans made by service providers in the delivery of broadcasting and electronic communication services. The Authority further recognised reported increased capacity constraints, service interruptions, customer frustration, increased maintenance costs and reputational damage as part of the contributing factors of the impact of loadshedding.

3.5. (Question 4) How has loadshedding affected Customer Service?**3.5.1. The Authority findings:**

The Authority found that the implementation of loadshedding has resulted in unreliability and poor service quality in the provision of broadcasting and electronic communication services. On the other hand, service providers that were employed to assist were unable to deploy backup power (generators and batteries) in certain unsafe areas (due to crime), where services were disrupted by loadshedding. In certain circumstances, prolonged and frequent loadshedding caused equipment malfunction and regular maintenance. Subsequently, customer service was impacted, causing customer disappointment and dissatisfaction.

The Authority also found that there was a significant impact on customer service during loadshedding, even when there were contingency plans made by service providers in the delivery of broadcasting and electronic communication services.

3.6. (Question 5) What are the impediments that are a result of the existing regulatory framework on your business, particularly related to loadshedding?

3.6.1. The Authority findings:

The Authority found that the impediments to compliance, according to various licensees, were on the following regulations:

- End-User and Subscriber Service Charter Regulations 2016 as amended.
- Code of Conduct Regulations of 2007.
- Code for Persons with Disabilities Regulations of 2021.
- Standard Licence Terms and Conditions of 2010.

Furthermore, the stakeholders highlighted the following challenges:

- Lack of exemptions for the ICT Infrastructure.
- Financial constraints due to Regulatory fees, levies, and licensing costs imposed by ICASA on business.
- Lack of network capacity: Loadshedding is making parts of the networks unavailable, there is a requirement to accommodate more customers on the remaining sites that have some protection against loadshedding.
- The timeliness of executing the USAO obligations and Social Obligations.

3.7. (Question 6) What regulatory interventions within the Authority's mandate should the Authority consider to provide relief to the electronic communications, broadcasting and postal sector concerning each stage of loadshedding? The interventions should be limited to what is within the Authority's mandate.

3.7.1. The Authority findings:

The licensees are of the view that the Authority must consider:

- suspending some of the compliance requirements. This includes regulations such as End-User and Subscriber Service Charter Regulations 2016 as amended ("EUSC Regulations"), Code of conduct, Code for persons

with disabilities (NRS) and Standard licence T&C. This can be achieved through relaxing the regulatory obligations.

- redirect funds towards implementing more resilience networks during loadshedding. This can be in the form of discounted spectrum fees, USO contribution and delaying the social obligations during the loadshedding period.
- issuing unused temporary spectrum to licensees that can prove that they are experiencing congestion on their network during loadshedding.
- lifting the channel per channel delivery and allowing for an overall network delivery against the self-regulated quotas for television/audio-visual services for the broadcasters.
- extending official time for prime time for the broadcasters.
- engaging with ESKOM on critical infrastructure to be exempt from loadshedding.

3.7.2. The Authority Position:

The Authority's position on the affected regulations is summarised below as follows:

3.7.2.1. Regulations in Respect of the Code of Conduct for ECS and ECNS Licensees¹:

The Code of Conduct regulations allow licensees to develop voluntary key commitments to provide services within their respective parameters or means possible as a good practice. The Authority is of the view that there is no link between loadshedding and the Code of Conduct provisions.

3.7.2.2. Standards Terms and Conditions:

The Authority is of the view that the Standard Terms and Conditions regulations provide general standard terms and conditions to all licensees to ensure regulatory certainty to demonstrate compliance with the principles of the primary legislation.

¹ Published in Government Notice No. 1740 (Government Gazette No. 30553) of 7 December 2007

It should be noted that the current Standard Terms and Conditions it is sufficient to allow licensees to apply for exemptions from compliance with the regulations when they experience any form of crisis. It must be noted that during COVID-19, the Authority increased the limit for broadcasting programme syndication and programme sharing from 20% to 45% to manage restrictions.

The Authority believes that during crisis periods, the Regulations should be responsive to the needs of the sector and allow for this increase to manage any form of national crisis.

3.7.2.3. Type Approval Process:

Association of Comms and Technology (ACT) and South African Communications Forum (SACF) advised the Authority to consider automatic type approval of equipment with prior approvals in other recognised jurisdictions. This approach would expedite market access for equipment that will aid in alleviating the effects of loadshedding or provide connectivity during loadshedding.

The Authority notes the suggestion, however the Authority is of the view that its current Type Approval process is sufficiently responsive to the urgent needs of the industry. Additionally, the newly developed Equipment Authorisation Regulations, published in Government Gazette 46146 on 31 March 2022 ("Equipment Authorisation Regulations"), make allowance for Type Approval Exemptions and for Applicants to provide a statement of conformity from a certification body for class 2 devices. Once these Equipment Authorisation Regulations are in force, they will provide a soft-touch regulatory approach that will ease the regulatory burden, thereby enabling quick market access.

3.7.2.4. End-user and Subscriber Service Charter /QoS Parameters Standard:

The Authority has noted the submissions by Licensees on the EUSC Regulations. The EUSC Regulations cover, in the main, a situation like loadshedding and its consequent impact on Licensees vis-à-vis the services they provide to the end user.

Regulation 16(1) of the regulations deals with impossibility of performance and states that in the event a licensee fails to provide end-users with the service due

to circumstances beyond its control for a period of more than two (2) hours, a licensee must

- a) "As soon as it becomes aware of the outage:
 - i. to notify the Authority in writing;
 - ii. issue the public notice to the affected end-users;
- b) Indicate timeframes within which end-users should expect the service to be restored; and
- c) *Submit a report to the Authority detailing the events that lead to the impossibility of performance including:*
 - i. the cause of outage;
 - ii. steps taken to minimise a repeat of the outage if applicable; and
 - iii. steps taken to inform the end-users of the outage".....

Therefore, licensees should have regard to and invoke Regulation 16, titled "Impossibility of Performance" in the EUSC Regulations 2016 as amended, in response to any loadshedding event they may experience.

The Authority is further encouraging Licensees to utilise the provisions of regulation 6(2) and 6(3) of the Standard Terms and Conditions amendment regulations as published in Government gazette No. 48317 of 28 March 2023².

3.8. (Question 6.1) How should these interventions vary depending on each stage of loadshedding?

3.8.1. The Authority findings:

The Authority found that these interventions ought to remain unaffected by the various stages of loadshedding as they serve the consumers' interests. Therefore, regardless of the stage(s) of loadshedding being implemented (even during the periods of its suspension, as is currently the case), it was essential for stakeholders to continue taking proactive measures and have monitoring systems in place (to the extent that they can) to mitigate the negative impact of loadshedding on their business continuity.

² Standard Terms and Conditions amendment regulations as published in Government gazette No. 48317 of 28 March 2023

3.9. (Question 7) Are there agreements in place in terms of the Energy Users Block Exemption, 2023? If so, have they yielded positive results?

3.9.1. The Authority findings:

The Authority found that there are currently no agreements in place in terms of energy user block exemptions. However, the Authority noted that the ACT was facilitating energy user block exemption for its members.

3.9.2. The Authority Position:

The Authority noted that licensees who took part in the inquiry did not apply for Energy Users Block Exemption. The Authority has no mandate to facilitate energy user block exemption as the mandate rests with the Competition Commission.

3.10. (Question 8) Have you concluded any wheeling agreements with Independent Power Producers (IPPs and ESKOM)? If not, are there any plans to conclude such agreements in future?

3.10.1. The Authority findings:

The Authority found that the majority of entities that took part in the inquiry have not concluded any wheeling agreements to date, and to a large extent, there is no indication that the wheeling agreements will be concluded soon except for Telkom, who submitted that it was still investigating wheeling solutions.

The Authority further found that Vodacom has concluded a virtual wheeling agreement with Eskom, and this submission is supported by ACT. In terms of the arrangement, Vodacom indicated it will secure electricity from independent power producers (IPPs).

3.11. (Question 9) Are there any efforts in place to combat theft, vandalism, and destruction of infrastructure during loadshedding?

3.11.1. The Authority findings:

The Authority found that licensees are collaborating closely with the Communication Risk Information Centre (COMRIC) through ACT to address the challenges of infrastructure sabotage and vandalism. COMRIC's efforts focus on sharing intelligence across sectors to combat crimes impacting Operators.

The Authority also found that other licensees have sought to protect batteries for their towers and related signal distribution apparatus with cement or concrete enclosures, especially in high-risk areas.

Licensees have also indicated that they have installed Closed-Circuit Television (CCTV) for remote monitoring and appointed armed response security to assist in securing their infrastructure.

The Authority further found that licensees have recruited local community members to serve as on-the-ground monitoring personnel for their infrastructure.

The Authority supports the initiatives made by the licensees and further encourages the involvement of Law enforcement agencies where the crime of sabotage and vandalism occurs. The Authority encourage licensees to continue collaborating with relevant stakeholders to ensure the safeguarding of their infrastructure from criminal syndicates.

3.12. (Question 10) What measures, if any, have you put in place within your space to mitigate the impact of loadshedding on the business and your customers?

3.12.1.1. The Authority findings:

The Authority found that licensees have invested in backup power systems to guard against loadshedding stages to ensure business continuity during power outages.

Licensees submitted that they have devised loadshedding mitigating strategies to ensure that their business continues to run and that consumers remain connected during power outages. There has been a considerable investment made by

licensees towards procurement of backup systems in the form of diesel generators, backup batteries and solar panels.

The Authority also found that the mitigation strategies implemented by licensees to counter the effects of loadshedding were not necessarily sufficient to address the effects of loadshedding but only assisted in mitigating the impact of loadshedding.

SECTION C: CONCLUSION

The Authority has noted that Eskom's generation capacity of electricity in South Africa has not yet stabilised.

The Authority has further noted Eskom approved generation recovery plan which is being implemented to address the challenges of loadshedding in the country.

The Authority will consider providing regulatory forbearance to the licensees on a case-by-case basis in terms of the existing regulations and investigate amendment of some Regulations which impede licensees from full compliance with their regulatory obligations to the Authority and end-users during loadshedding.

Currently, some of the regulations, such as Standard Terms and Conditions for ECS/ECNS and Broadcasting Services, have provisions that allow licensees to submit to the Authority the applications for exemption/s from compliance with certain elements of compliance requirements when they encounter force *majeure* elements which hinders them from meeting their compliance requirements.

The Authority further recommends that licensees continue to invest in renewable energy as a form of ensuring that their services continue to run effectively and efficiently when they experience loadshedding in future.