
Submission to the Independent Communications Authority of South Africa

DRAFT END-USER AND SUBSCRIBER SERVICE CHARTER REGULATIONS, 2022

EXECUTIVE SUMMARY

1. Telkom appreciates that the object of the draft End-User and Subscriber Service Charter Regulations, 2022 (the “Regulations”) are to enhance the provision of quality of service of electronic communications services to consumers.
2. However, Telkom has grave concerns that certain amendments are impractical, substantially increase the regulatory burden on Telkom and may result in an unintended increase in the cost of communications to consumers. This is contrary to the object of the Regulations.
3. In particular, the 6-month validity period in respect of unused voice, sms and data will result in Telkom not being in a position to provide consumers with the option of various bundled offerings. It will also negatively affect its ability to offer lower prices to customers that can only afford or require bundles for shorter validity periods.
4. The review and possible removal of various bundles with different price points and validity periods will further impact consumer choice and is ultimately to the detriment of consumers. In addition, provisions requiring unlimited data transfers will effectively result in the regulation of the market where electronic communications services are resold without the necessary licence/s or oversight.
5. The new proposed service parameters also fail to take into account that 3G technology is in the process of being phased out and quality of service parameters in relation to 3G voice and data services is therefore impractical. Further, a substantial amount of spectrum that was initially used for 3G is also being used for LTE. This and various other difficulties in relation to the proposed parameters are detailed in our submission. Telkom is unable to meet certain service parameters for 3G and 4G preferred data due to spectrum constraints as well as factors such as vandalism and service outages, which are outside Telkom’s control.
6. In addition, Telkom cannot be held responsible for the performance of other OTTP’s and/or OTT provider offerings or web hosting services. Telkom can only guarantee performance on its own network and cannot commit to performance parameters on the

networks of roaming partners or in instances involving servers not located in the Telkom network.

7. Finally, the stipulated measurement parameters are intended to be achieved by licensees when measuring performance of their networks over long periods, such as 6 months as set out in the current Regulations. Any other testing method to be used by the Authority, such as drive testing, crowdsourcing, etc. is not an accurate reflection of overall network performance. As such, these measurement results are not an accurate reflection of overall network performance nor of compliance with the parameters specified in the Regulations.
8. Our detailed comments are set out below.

COMMENTS

Definitions

9. Telkom has no difficulty with the definitions proposed by the Authority in Regulation 1, subject thereto that where applicable, Telkom can only be held responsible for the service parameters measuring performance on Telkom's network.

Amendments in relation to expiry of voice, sms and data

10. Telkom notes that regulations 8A (4), (5) and (6) and 8B(3) require that unused voice and/or undepleted SMS services, obtained through prepaid or postpaid channels, as well as unused data, remain valid for 6 months, except for promotional packages.
11. Increasing the validity period to 6 months for all data bundles will result in Telkom not being in a position to provide lower prices to customers that can only afford, or require, bundles with shorter validity periods. This is due to cost increases associated with having to increase the capacity on the network to accommodate 6 months validity periods on all products.

12. The proposed regulations have the effect of limiting the right of consumers to choose products best suited to their needs. Enforcing a 6-month validity period on all products will negatively impact differentiation, stifle innovation and harm competition, in particular for smaller operators who are currently able to differentiate their service offerings from larger competitors. Further, the imposition of a set validity period for all products does not, in Telkom's view, support the object of the ICASA Act of regulation in the public interest as set out in section 2(b) of the ICASA Act of 2000. It is also not contemplated by section 69 of the ECA nor in section 2(n) thereof, which refers to an object of the ECA being to:

Promote the interests of consumers with regard to the price, quality and the variety of electronic communications services.

13. Telkom suggests that as a solution and in order to enhance customer choice and affordability, bundles with a validity period of less than 6 months should be permitted and be made available by licensees so that customers have the freedom to choose which validity period would best suit their needs. Telkom further suggests that the validity period of bundles should be expressed in a transparent manner to allow customers to make informed choices.

Order of consumption

14. We note that a licensee must apply voice and sms usage against the oldest of any unused voice and SMS services first and thereafter against newly allocated voice and SMS services.

15. Telkom currently applies the rule that oldest / carried over bundles are used first before the new allowance can be used in each category of bundle such that promotional bundles are used first, then inclusive allowances such as AnyTime / Night data, then recurring bundles, followed by once-off bundles. The oldest data in each category is therefore used up first. This approach is well understood by Telkom customers. Requiring Telkom to change its methodology will only serve to confuse customers and will not have any positive impact on customers contribute to decreasing the costs to communicate.

Transfer of data

16. Telkom notes that the transfer of data must not be limited to specific products and/or payment types, except for uncapped or free promotional bundled products, must apply to any SIM card or device on the same network, including SIM cards or devices owned by the same end-user, and must be possible without any limit on the number of times that the end-user may transfer such data.
17. Further, where the end user is unable to utilise specific promotional data packages or bundles due to a fault on the part of the licensee (such as network outages or service breakdowns), the licensee must compensate the end user appropriately (such as by giving a rebate or by extending the validity period of the product concerned).
18. Telkom has adopted an open, transparent and easy to use approach to the transfer of data. All subscribers on mobile postpaid, TopUp and/or prepaid plans can transfer inclusive all-network data to any other subscriber on the Telkom Mobile network. Customers are able to transfer data in denominations of 25MB, 50MB, 100MB, 250MB, 500MB and 1GB. However, given that Smartbroadband data does not include roaming data and is only available on the Telkom network, it cannot be transferred to a SIM which provides access to roaming data, since Smartbroadband data is on-net data and can technically not be converted to roaming data
19. While the number of times that a subscriber is able to transfer data is not capped, the total amount of data that can be transferred is limited to a maximum of 1GB per day and 10GB per month. A requirement to allow unlimited transfers could result in end-users transferring data to unlicensed operators/resellers, who could then resell the data contrary to the prescribed regulatory regime.
20. With regards to compensation referred to in the draft regulations, Telkom will be able to compensate end-users appropriately by providing a rebate or additional data/minutes.

Notifications, education and awareness

21. Telkom notes that licensees must notify affected end-users via SMS, social media platforms, and its own website, 7 days before, and a day before, of any planned service interruptions due to service or system upgrades and of any major network outage that results in poor quality of service as soon as it occurs.
22. We further note that licensees must educate end-users on cybersecurity and on the protection of personal information and provide consumer alerts on specific issues which the Authority may deem relevant and necessary for the protection of end-users, e.g. fraudulent SIM swaps & number porting, billing, public health warnings and public safety notifications, State of Disaster / State of Emergency notifications, or any other issues which affect consumers, and which require immediate dissemination.
23. Telkom is able to provide notifications via SMS and its website before planned service interruptions on its network resulting from service or system upgrades on its own network. However, Telkom suggests that the Authority consider referring to sms notifications, notifications on a licensee's website or notifications per social media as examples, since there are a number of means for reaching consumers. This includes OTT messaging services such as WhatsApp and Telegram which may prove more effective in reaching certain consumers than the platforms suggested.
24. With regards to the education of end-users, Telkom already provides consumer education on cybersecurity, the protection of personal information and fraud awareness. We provide fraud alerts to customers on a monthly basis. These alerts provide details on the latest scams and contain tips for customers on how to avoid becoming a victim of fraud. We also have an anonymous helpline where customers can report suspected fraudulent activities.
25. With regards to the Authority's proposal to notify end-users of public emergencies or similar events, we request that we be provided with reasonable notification and that issues such as the cost and frequency of such communications be taken into account by the Authority. Further, due to the unintended impact of various additional warnings and notifications on the cost of communication, we also propose that the Authority

consider providing that this information be made available on the Authority's website, as well as the website of the Department of Communications and Digital Technologies and the Department of Health, as applicable.

Measurement Parameters for Fixed, Fixed Wireless and Mobile Services

26. We note that the Authority refers to reviewable targets having been set through the Broadband Policy (SA Connect) – starting with an average user experience of 5Mbps in 2016 available to 50% of the population, to increase to 90% in 2020 and a universal average download speed of 100 Mbps by 2030.

27. As a general comment, Telkom confirms that the current and proposed quality of service measurement parameters only apply to the relevant licensee (Telkom's) network, and not where traffic originates from servers not on the Telkom network. Network and service availability is therefore measured on Telkom's network.

28. Telkom confirms in terms of our IMT800 spectrum licence, the requirement is to cover 80% of the population at 5mbps at the cell edge for a single user within 5 years from the effective date of the licence (i.e. 1 July 2022) or from the date when the digital migration process is completed, whichever comes later.

29. The term of our spectrum licence is 20 years, and accordingly the Authority's requirement of a universal average download speed of 100 Mbps by 2030 is not aligned with the provisions of Telkom's spectrum licence. In any event, the target of 100 Mbps through mobile with current spectrum assignments is not possible.

30. As a general comment, 3G is a technology that is being phased out. This complicates compliance with the proposed thresholds. Telkom uses 3G primarily for voice. More than 80% of Telkom's data traffic is on 4G and a small incidental traffic is 3G.

31. In addition, the 2100 MHz band has been refarmed from 3G to 4G, i.e. 2x10 MHz is now used for LTE leaving the 3G network with a single 2x5 MHz carrier, which is used for data and voice services.

32. Telkom confirms that all proposed parameters are measured at a network level, over a 6-month period. Electronic communication network monitoring by the Authority in accordance with Regulation 10 is therefore not an accurate reflection of overall network performance at the network layer. See also comments below regarding proposed Regulation 10.

3G voice service

33. Telkom supports the 3G voice service parameters except the proposed average dropped call threshold of $\leq 2\%$. Regarding the latter, Telkom supports the currently used average dropped call threshold of $\leq 3\%$. The proposed threshold is not possible to achieve due to factors outside of Telkom's control. These factors include vandalism, load shedding, lack of access to 3G capable (i.e. 900 MHz) sub 1 GHz spectrum, etc.

34. Further, it is likely that in some point in the near future, VoLTE and not 3G will be used for voice services, complicating the ability to comply with the 3G voice service measurement parameters.

35. Although the desktop research done by ICASA indicates that a DCR of 2% is generally used in the selected countries, it must be noted that these countries set their values based on actual data such as operator data reports and network measurements. It is therefore not appropriate to use only benchmarking of other countries to set parameters for South Africa. Based on the drive tests done by the Authority over the last few years, it should be clear that a target of 2% is not achievable at this stage. Also, the fact that Telkom does not have access to 3G capable (i.e. 900 MHz) sub 1 GHz spectrum, which also negatively impacts Telkom's ability to achieve the 2% target on 3G.

36. Crowdsourcing is also not a consistent or reliable measure, as there are a lot of variables involved including complying with privacy legislation, the method used to gather the data and the sample size. Crowdsourcing should be used with care when used to verify parameters.

3G preferred service data service

37. Except for average speech quality mean opinion score (MOS) and signal strength, the phasing out of the 3G technology complicates compliance with the remainder of the prescribed parameters. Telkom is unable to achieve the remainder of the parameters due to spectrum constraints, namely that the 2100 MHz assignment has been refarmed to 2x10 MHz for LTE. This leaves the 3G network with a single 2x5 MHz carrier, which is used for 3G data and voice services. More than 80% of Telkom's data traffic is on 4G and a small incidental traffic is using 3G. Telkom uses 3G primarily for voice.

38. In addition to this, any new spectrum which may be assigned will be 4G/5G and therefore will not address 3G data services. The phasing out of 3G means that the quality of service on 3G network cannot be guaranteed.

4G preferred data service

39. Telkom agrees with the proposed 4G signal strength $RSRP \geq -115$ dBm. However, the proposed average application throughput download value, the File Transfer Protocol (FTP) Average Download Throughput, as well as the Hypertext Transfer Protocol (HTTP) Average Download Throughput value, which are all stipulated as ≥ 10 Mbit/s, are not acceptable. This value is in contradiction with Telkom's IMT spectrum licence conditions pertaining to the spectrum obtained through the recently concluded auction, which stipulate a value of 5 Mbps.

40. It is further not possible to commit to the File Transfer Protocol (FTP) Average Upload Throughput and the Hypertext Transfer Protocol (HTTP) Average Upload Throughput of $\geq 2,5$ Mbit/s each, as well as the latency average of ≤ 50 ms, due to factors outside of Telkom's control, including ongoing vandalism and power outages.

41. The FTP and HTTP Average Upload throughputs of $\geq 2,5$ Mbit/s each is accepted, subject to network resources on the server being sufficiently dimensioned.

42. Telkom further proposes an average of 3.1 MOS Average Speech Quality Mean Opinion Score (MOS) (VoLTE). The Authority's proposed value of 4 is too high; and a value of 3.1 is reflective of a good quality voice connection.

End user cases

43. Telkom cannot be responsible for the performance of other OTTP's and web hosting services, with the exception of Telkom's own web hosting services/video platforms. As such, Telkom will perform these measurements exclusively on-net to measure Telkom's network performance.

Electronic Communications Network Monitoring

44. Telkom notes that the Authority will monitor Quality of Service performance provided by a licensee, at any given time, or on an ad-hoc basis by means of drive tests, walk tests, probes and/or counter, crowdsourcing, data acquired from the Network Performance Monitoring System submitted by Mobile Network Operators, and other methods that the Authority finds relevant to audit licensees on.

45. We note that the frequency of these QoS audits as well as the applicable licensees, the services, parameters, reporting areas and reporting periods that require audits, are all at the sole discretion of the Authority and will not be advertised in advance.

46. Further, a Licensee shall provide raw network performance data to the Authority upon request, and a licensee shall grant the Authority access to collect raw network performance data from the licensee's platform(s) by an appropriate means of monitoring, including but not limited to software and / or hardware application.

47. Measurement parameters are intended to be applied to measure performance over long periods, such as 6 months as set out in the current Regulations. Any other method will not be an accurate reflection of overall network performance.

48. For example, the drive tests conducted by the Authority will provide a snapshot of the network performance in specific areas, on specific days and times, and are not representative of the overall national network performance. Also, in certain areas Telkom has not deployed a network and is reliant on its roaming partners for mobile services to its customers, and drive tests is not an accurate reflected of Telkom's overall network performance.

49. The uncertain nature of the QoS monitoring is also of concern, as is the impact of ad hoc audits on the maintenance of security protocols to protect consumer and confidential information. Such ad hoc audits also expose our network to cyber security attacks and results in an increase in costs which may impact on the cost of communications.

50. Information on raw network performance data is commercially sensitive information and in Telkom's view, not necessary for the Authority to perform its oversight.

Conclusion

51. While Telkom welcomes efforts by the Authority to improve quality of service to end-users, various provisions of the proposed regulations, in particular the 6-month validity period for voice, sms and data and some of the service parameters, will have the opposite effect. It will stifle competition, limit consumer choice and have the unintended result of increasing the cost to communicate.

52. We trust the Authority will afford our submissions the necessary consideration. Should there be oral hearings, Telkom would like the opportunity to participate.