



Telkom Submission to ICASA

Draft Revised End-User and Subscriber Service
Charter Regulations

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Submission by: Telkom SA SOC Limited

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EXECUTIVE SUMMARY

1. Telkom SA SOC Limited ("**Telkom**") welcomes the opportunity to submit its comments on the Draft Regulations published by the Independent Communications Authority of South Africa ("**ICASA**", "**the Authority**") Government Gazette 37251, dated 22nd January 2014.
2. Telkom acknowledges that the End-User and Subscriber Service Charter ("**Service Charter**") sets out network service, operational and service quality parameters with the intention to protect the interests of end-users. We understand that, essentially, the Service Charter is imposed on Electronic Communications Network Services ("**ECNS**") and Electronic Communications Services ("**ECS**") licensees to guarantee a *minimum* level of service to end-users.
3. In this submission, Telkom aims to highlight the potential negative impact of the draft amended End-User and Subscriber Service Charter Regulations ("**Draft Regulations**") on both business activities and end-users.
4. Telkom notes the substantial review of the 2009 Service Charter Regulations. However in its review, the Authority has not considered the recommendations made by the Complaints and Compliance Committee in October 2012. The Draft Regulations therefore remain highly problematic and incapable of implementation. Consequently this submission contains several recommendations that will facilitate the attainment of fair and workable regulations.
5. From Telkom's perspective, the Draft Regulations pose the following risks:
 - a) The unwarranted significant increase in regulatory requirements will lead to increased compliance costs which may have the following unintended consequences: higher retail prices; intentional non-compliance and the reallocation of resources away from network and broadband deployment in order to meet regulatory requirements.
 - b) The Draft Regulations contain several flaws such as absence of material definitions, inconsistencies and ill-defined measurement procedures. These flaws render the Draft Regulation unimplementable. Furthermore, the vague nature of the Draft Regulations may be open to exploitation by certain operators for the purposes of misreporting.
6. Telkom is of the view that the abovementioned risks may be averted by taking the following recommendations into account:
 - a) **Reducing regulatory obligations** by reducing the number of Quality of Service ("**QoS**") metrics measured. Telkom does not support the utilization of the following QoS metrics, given that reporting of same is infeasible and merely poses an administrative and regulatory burden on network operators: Inter Network Call Connection Loss; Average Blocked Call Rate; Delay Ratio; Speech Quality; Call Handover Success Rate; Packet Loss Ratio; Latency; Successful Data Transmission Ratio and Service Coverage.

- b) **Relaxing selected QoS metrics** in order to take into account the unique National ICT landscape and to offset the impact of factors beyond the control of network operators. These metrics include: Availability of Fixed wireless/Fixed Wireline and Mobile ECNS; Availability of Mobile ECS; Installation of Fixed wireless/Fixed Wireline Services; Average Time to Clear Fixed wireless/Fixed Wireline Service Fault and Dropped Call Ratio.
7. In addition, Telkom recommends the following in order to facilitate the practical implementation of the Draft Regulations:
- a) A shift from the proposed quarterly reporting to bi-annual reporting in order to minimise the administrative burden.
 - b) The establishment of a well-defined methodology for conducting drive tests and performing measurements,
 - c) A substantial revision of the Draft Regulation in order to remove the ambiguities or inconsistencies that currently exist.

INTRODUCTION

8. Telkom SA SOC Limited ("**Telkom**") welcomes the opportunity to submit its comments on the Draft Regulations published by the Independent Communications Authority of South Africa ("**ICASA**", "**the Authority**") Government Gazette 37251, dated 22nd January 2014.
9. Telkom acknowledges that the End-User and Subscriber Service Charter ("**Service Charter**") sets out network service, operational and service quality parameters with the intention to protect the interests of end-users. We understand that, essentially, the Service Charter is imposed on Electronic Communications Network Services ("**ECNS**") and Electronic Communications Services ("**ECS**") licensees to guarantee a *minimum* level of service to end-users. The service parameters prescribed in the Service Charter relate to both the implementation and ongoing use of telecommunications services. Service quality standards also relate to all aspects of network assessment and management of the network. The Authority has gone to great lengths to define service and performance targets that reflect variations in network technologies, in so doing it has acknowledged that a "technological neutral" charter does not make sense.
10. After reviewing the Draft Regulation, Telkom has serious concerns regarding the technical and legal implications of some of the requirements set out in the regulations. We appreciate that the Authority has pursued a public consultation in this regard and we trust that our comments will assist towards the attainment of fair and workable regulations. Should the Authority decide to hold public hearings, Telkom wishes to actively participate therein.
11. Telkom encourages the Authority to clearly articulate the key principles that underlie the provisions in the Draft Regulations, since these principles are not readily apparent in the Draft Regulations. We propose that the requirements set out in these regulations align to the regulatory objectives in the Electronic Communications Act ("**ECA**") while also adhering to other legislation such as the Consumer Protection Act No 68 of 2008 ("**the CPA**"). Accordingly, Telkom is concerned that some of the requirements being imposed are burdensome, duplicative of other legislation, and therefore unnecessary. Furthermore, the proposed targets may result in unintended behaviours and may therefore ultimately contravene the primary goals driving the Draft Regulations. Without any underlying principles, an informed evaluation and study of the proposed regulations becomes problematic and the standards imposed appear somewhat arbitrary.

INTERNATIONAL BENCHMARKS

12. International best practice dictates that the scope of QoS metrics and their associated target values should be based on¹:
 - a) Precise purpose;
 - b) Quality and performance as expected by users;
 - c) The usefulness and relevance of the parameters from the user's perspective;
 - d) Degree to which parameters will provide a reliable comparison of performance; and
 - e) The cost and resources needed in order to measure and report each parameter.
13. International benchmarks show that there are different Quality of Service (“**QoS**”) parameters for different types of services. Further, the fault clearance standards specifically apply to fixed network service providers only, whilst dropped call rates apply to mobile networks. Target setting is approached differently in most jurisdictions; and is differentiated according to the type of service provided. For example, in Australia the measurements and targets for fixed telephony are defined and set by the regulator; whereas there are no prescribed measurements and targets for narrowband internet. Similarly, in Brazil the measurements and targets for all telephony are defined by the regulator; whereas there are no measurements and targets for narrowband internet.
14. Although different approaches be adopted in various jurisdictions, the regulatory goal of QoS standards remains consistent, namely:
 - a) To ensure the delivery of acceptable service for the telecommunications user; and
 - b) To ensure that consumers are aware of the variations in performance from various service providers/operators thereby allowing them to make an educated choice when selecting services.
15. In India for example the Authority has considered an exclusion of force majeure incidents in their calculations, and considered that fault repair in rural and hilly areas could take longer than the norm.
16. In Kenya, the quality assessment is in its third year and is based on eight indicators. These are completion of calls, success of calls set-up, the call set-up time, call drop rates, blocked calls tendencies, speech quality, handover success rate and the strength of the received signals. According to Communications Commission of Kenya (“**CCK**”), the operators are required to meet seven out of the eight quality benchmarks.
17. In cases where the regulator has chosen not to define measurements nor set targets, operators are required to publish their performance statistics on special QoS websites which consumers and other operators can access to. Consumers may then use these websites to guide them in their choice of

¹ ITU-T Recommendations (E.802)

service provider (transparency). For example, Ofcom launched the TopComm website which publishes five (5) measurements for 20 fixed operators. Here consumers may compare the service quality standards of telecoms operators.

18. The ICT Quality of Service Regulations: Practices and Proposal, issued by the International Telecommunications Union (“ITU”, ITU, 2006) warns that QoS targets are not always effective in improving quality. The ITU further asserts that the power of publicity is greatest when there is competition and when published measurements distinguish between different operators. The ITU further suggests that the measurements on QoS must be practical to operators and comparable between operators.
19. The common view is that, other than imposing a fine, there are various techniques that can be considered to ensure compliance. For example, publishing performance statistics, publicising poor performance to customers, demanding remedial plans and monitoring their performance and requiring compensation for customers. For example, in Australia and India, an operator who exceeds the time specified to meet certain targets on any occasion must pay compensation to the customers. It, however, appears as if the Authority has opted for a variety of highly punitive enforcement measures. The regulations require publication of performance statistics publicizing poor performance to customers, requiring compensation for customers, as well as the imposition of a fine.

PRINCIPLES UNDERLYING QUALITY OF SERVICE MEASUREMENTS

20. The Service Charter has a major impact on the business activities of licensed operators in that it directly influences a licensee’s structures, processes and systems when a licensee is required to comply and report on a quarterly basis. Telkom acknowledges that transparent measurement of quality of service and performance metrics could result in the betterment of consumer interests; however there is a cost to this approach, including the possibility of higher retail prices, intentional non-compliance, uncompetitive market conditions, and so on. As a consequence, the primary policy objective which is to increase access to consumers throughout the country begins to take secondary importance.
21. Moreover, the prescriptions set out in this type of regulation should be aligned to the practices of successful, competitive telecommunications operators whilst balancing consumer interests and financial impact of such requirements on operators. Telkom believes that prior to the publication of the Regulations, the Authority should be better informed in terms of whether their implementation will result in the regulatory outcomes it ultimately seeks to achieve, namely:
 - a) To avoid market failure;
 - b) To foster effective competition;
 - c) To project consumer interests; and
 - d) To increase access to technologies and services.

22. Surprisingly, the Authority has **increased** its requirements. This is counter intuitive in the highly competitive telecommunications landscape that is rapidly emerging in South Africa: Today, the voice services market is saturated and end-users have a plethora of operators and services to choose from while having excellent access to information as they make their choices. There are over 550 licenced operators that can provide innovative information, communications and broadband services in South Africa.
23. Within the overarching legislative regulatory framework of South Africa, evolutions in policies and legislation such as existence of the Consumer Protection Act, Competition Act, inter alia, provide several alternative mechanisms that do not merit duplication here. In similar market conditions, world-wide regulators are moving toward **reducing regulatory obligations** such as these. They have opted to step back from intervention and allow natural competitive forces to influence the quality of customer service and network performance.
24. Predictability and transparency are critical aspects of regulatory processes. The Authority has not published an Explanatory Note to support the introduction of regulations that are vastly different to its predecessor. Surely, if the industry is to invest in improving its operations to meet the Service Charter Regulations, the industry deserves to understand the Authority's rationale for imposing such onerous obligations.
25. Clarity is sought on a number of matters. Firstly, it is unclear, how the recent Complaints and Compliance Committee ("**CCC**") rulings have influenced the design and formulation of these draft regulations. It is also not clear what the Authority's intentions really are. This exercise poses the following:
- a) Are the regulations intended to improve the betterment of consumers?
 - i) If so, then should the Authority not be cognizant of the impact that such regulations will have on the underlying cost structure and delivery mechanisms of an licensee?
 - ii) Would these regulations not potentially result in higher costs which may indirectly result in higher prices to consumers?
 - b) Are the regulations intended to promote competition and infrastructure investment?
 - i) If so, then should the Authority not be cognizant of whether these regulations create an unbalanced competitive environment – particularly where operators such as Telkom must work with legacy systems and networks that are often under constant repair and upgrade compared to emerging entrants who have the luxury of avoiding such challenges?
 - ii) Is the Authority implying, that licensees should reallocate resources away from network and broadband deployment toward meeting these requirements? In Telkom's case, compliance with all requirements has been, and will continue to be, expensive amounting to billions of

Rand for a process that may be a distraction from our ultimate objective of improving broadband connectivity for all South Africans.

- c) Are the regulations intended to be punitive towards licensees to merely ensure that standards are met?
- i) Would such penalties not compel operators to weigh the cost of implementing improvements against the cost of penalties, and then choosing not to comply simply because it is cheaper to do so? Or worse yet, misrepresent their performance since appropriate controls and processes to guard against this are absent throughout the regulations?
 - ii) Would it simply not be better to engage with operators to collectively create a plan to deliver the quality of service outcomes which ICASA is keen to achieve?
 - iii) In the end, would the service standards not simply result in more regulatory bureaucracy and ultimately harm the average end-user?
- d) Are the regulations intended to spur operators toward world class standards?
- i) If so, how were targets set and, in particular, why has the Authority not shared such empirical evidence with the industry to help us improve our capabilities?
 - ii) Do the standards reflect the unique economic and social challenges that face South Africa or are such standards being drawn from developed countries that are not comparable?
26. Finally, and most importantly, there are inconsistencies, absence of material definitions, ill-defined measurements and other flaws throughout the Draft Regulations. Therefore, it is Telkom's considered view that these Draft Regulations must receive a substantial redraft and overhaul that is informed by an engagement process. This is the only way in which the outcomes of these regulations will really benefit all stakeholders in the telecommunications industry. We welcome the Authority to engage with us on all aspects of the Draft Regulation, going forward.

RECOMMENDATIONS OF THE COMPLAINTS AND COMPLIANCE COMMITTEE

27. In October 2012 the CCC recommended that the End-User and Subscriber Service Charter Regulations ("Service Charter Regulations of 2009"), published in Government Gazette No.32431 of July 2009, be reviewed. On p41 of the CCC judgement in the matter between ICASA and Telkom (Case no: 60/2011) it was remarked at paragraph 225 bullet point 2 that:

" Pursuant to the above, we recommend that:

The Regulations as they stand, are problematic and are not capable of implementation and Telkom has approached the High Court to challenge their validity. To avoid costs associated with litigation

and negative publicity, we advise that the Authority considers engaging Telkom with a view that it stops its Court action with an undertaking that the Authority will review the Regulations."

28. Further in this judgement in respect of the above mentioned matter, CCC remarked as follows on page 42 in paragraph 226:

"If ICASA is considering bringing other licensees before the CCC on similar charges like Telkom, we urge the Authority to suspend them until the Regulations are reviewed."

29. Telkom welcomes a comprehensive review of the Service Charter and we view this step by the Authority as an important step in a process that will eventually result in more meaningful regulation of the industry. Presumably, the Draft Regulations are a consequence of a review of the Service Charter Regulations of 2009. However, the findings of such a review have not been disclosed nor has a rationale been provided to justify the structure and form of the Draft Regulations being proposed. The impact of these regulations are intrusive and they should not only be informed by the submissions received from licensees, but should equally be responsive to the unique situations of licensees and evolving ICT developments in South Africa.
30. Finally, we note that although the CCC matter mentioned above centred mainly around fault clearance and penalty regulations contained in the Service Charter Regulations of 2009, the Draft Regulations show that no substantive amendments have been made to the requirements, specifically pertaining to fault regulations for fixed licensees / operators nor have they improved clarity on the application of penalties.

QUALITY OF SERVICE FOR FIXED LINE NETWORK LICENSEES

31. Licensees provide coverage across South Africa, in rural and urban areas, through different types of networks each with their unique characteristics. A range of external factors have an impact on the provisioning and availability of network services to the end-users and these need to be brought to bear in proposing operational, network and other service performance standards. The rationale for the increasingly stringent requirements proposed has not been provided by the Authority and does not appear to reflect a consideration of the unique networks of licensees.
32. Telkom has always maintained that it is unreasonable to expect that the same requirements should be applicable to services provided to end users in urban areas and in rural and underserved areas, with sparse network coverage or where infrastructure is not present to deliver a high quality of service. Telkom has over 1300 exchange areas that fall into the latter category, representing 70% of our geographic coverage. Our rural field force has simply not been organised to meet the proposed service standards in rural areas. Telkom proposes that the standards set out in the Service Charter make a

distinction between services to rural and urban areas and we would welcome the opportunity to share our business and performance in these areas with the Authority.

33. Finally, these Draft Regulations fail to take into account that fixed licensees have unique network elements that should justifiably be assessed against uniquely suited minimum service standards. Furthermore, related to this issue, is the oversight of ICT infrastructure development that is an ongoing issue within South Africa. Realistically, given the fact that ICT infrastructure development in the country is not as advanced and at the same level across the country, the proposed minimum standards can hardly be applied uniformly. Some qualifications and possible exemptions may be necessary to take into account the extent of infrastructure development.

DEFINITIONS AND MEASUREMENT ISSUES

34. The Draft Regulations propose several new metrics which aim to assess the QoS of mobile networks. However, the reporting of several of these metrics is not feasible and merely imposes an administrative and regulatory burden on licensees. Based on the arguments put forward in this submission, Telkom does not support the inclusion of the following metrics in the Draft Regulation:

- a) Inter Network Call Connection Loss;
- b) Average Blocked Call Rate;
- c) Delay Ratio;
- d) Speech Quality;
- e) Call Handover Success Rate;
- f) Packet Loss Ratio;
- g) Latency;
- h) Successful Data Transmission Ratio; and.
- i) Service Coverage

35. Telkom notes the following areas where definitions need to be added and/or refined in the Draft Regulations. Proposed modifications are **emphasised**, accordingly.

- a) **Availability:** Telkom proposes the following revision to the definition in order to avoid confusion with the commonly used QoS term, Network Availability.

“Service Availability means”

- b) **Days:** The Draft Regulations are not consistent when referring to days and it is unclear whether it constitutes calendar or business days. Consistency is required in this regard and Telkom proposes the following revisions.

“Days” are defined as business days, as prescribed in the ECA, refers to general ordinary working days, excluding public holidays and weekends.

- c) **Faults:** The proposed definition does not explicitly exclude faults resulting from faulty customer premise equipment (“CPE”). We propose the following addition to the definition:

"Non-functionality of customer premise equipment that results in service disruption or unavailability to the End-User and Subscriber is excluded as a fault under these regulations."

- d) **Installation:** Telkom notes that there could be a possibility of confusion relating to the exact time meant or referred to in this definition due to the lack of sufficient clarity. We propose the following revision:

".....from the date the service is requested, not from the date the application is made."

- e) **Packet Loss Ratio:** The definition proposed in the Draft Regulations is not consistent with internationally agreed norms. Moreover, packet loss ratio is usually computed by considering, inter alia, the transmitted number of packets as opposed to the total number of packets received, as specified in the Draft Regulations. In light of the aforementioned, Telkom proposes the suppression of the current Packet Loss Ratio definition and replacement of same with the following:

“Packet loss ratio is the ratio of total lost IP packet outcomes to total transmitted IP packets in a population of interest” [Source: ETSI TS 102 024-12]

- f) **Quality of Service:** The proposed definition of QoS does not acknowledge the fact the QoS is a collective effect of service and network performance. Therefore, Telkom proposes that an internationally agreed definition of QoS be adopted instead:

“Quality of service refers to the totality of characteristics of a telecommunications service that bear on its ability to satisfy stated and implied needs of the user of the service.” [Source: ITU-T E.800]

- g) **Quality of Service Measurements:** The proposed definition does not reflect the fact the QoS measurements are performed on both the network and service level. Therefore, Telkom proposes the following generic definition which addressed our concerns:

“Quality of Service Measurements – means measurement of a characteristic that is used to determine the QoS.”

- h) **Reporting Period:** Telkom is not clear whether this definition attempts to refer to the quarterly periods that are set out in the schedule 2, namely April, July, October and January? If it is the case, Telkom suggests that it be categorically stated in the definition.

IMPLEMENTATION

Reporting

36. The Authority proposes to institute reporting on quarterly basis instead of bi-annually as is currently the case. This creates an administrative burden for most licensees. Telkom urges the Authority to reconsider this requirement in the interests of achieving what the Draft Regulations seek to do. This reporting process essentially doubles the regulatory reporting burden on all operators and appears counter intuitive in a market that is rapidly becoming more competitive.
37. Where previously, licensees were required to report monthly results, on a bi-annual basis, they will be expected to compile and furnish results twice as frequently. The Authority, will not necessarily be receiving more information, but will rather be receiving the same information more frequently – essentially making it. not only more administratively cumbersome and costly for all licensees in the industry, but also increasing the regulatory burden for the Authority itself. There is a cost implication for changing this requirement and this has not been acknowledged by the Authority.
38. This requirement for quarterly reporting would potentially further compound the issue of how the duration of a contravention is determined and eventually penalised.
39. **Telkom proposes that the Authority return to bi-annual reporting.**

Publication

40. The Draft Regulations aim to, “*make information available that will help end-users make informed choices on services offered by licensees and through the publication of service performance.*” **Telkom acknowledges the importance of educating the consumer thereby facilitating well informed decisions. Furthermore, Telkom is of the view that the consumer should be provided with the relevant technical data, which will assist in the interpretation of QoS results.**
41. In particular, **Telkom proposes that QoS statistics relevant to mobile networks should be published on a frequency band specific basis**, given that the propagation characteristics of spectrum have a significant impact on the level of QoS attained.
- a) For example, services deployed in the sub 1 GHz range will typically have a higher level of QoS as compared to services deployed in higher frequency bands. This phenomenon can be attributed the favourable propagation characteristics of the sub 1 GHz frequency bands.

- b) Furthermore, this form of reporting will serve to highlight the fact that certain operators do not have access to sub 1 GHz spectrum, which underpins the provision of high levels of QoS.

Drive Test Methodology

- 42. Telkom notes that the Authority has adopted the Drive Test approach in order to assess mobile QoS. This approach is advantageous since it measures the network from an external point as would be seen by the user. However, test drives only provide a snap-shot in time and location of the performance of the network as measured with the equipment used.
- 43. Given that the publication of Drive Test measurements will ultimately result in the benchmarking of different network operators, it is necessary to establish a methodology for conducting such tests. The establishment of this methodology will serve to mitigate several factors which may affect the comparability of drive test measurements. Therefore, Telkom proposes that the Draft Regulations be amended to include a well-defined drive test methodology. The proposed methodology must address, inter alia:
 - a) Specification of drive test routes that are representative of users behaviour in location and time;
 - b) Statistically representative sample sizes;
 - c) Measurement equipment configuration and health checks; and
 - d) Well defined measurement procedures for each metric, including amongst others, the specification of relevant trigger points and measurement windows.

PENALTIES

- 44. **It is noted that the Authority proposes to increase the penalty to a fine not exceeding R 1 000 000 compared to the previous amount of R 500 000. The Authority has not set out its rationale for increasing this penalty. Telkom therefore objects to this increase.**
- 45. Furthermore, the Draft Regulations are not specific as to how these penalties will be applied. This raises more questions with regard to the administration of penalties:
 - a) Does the maximum penalty apply to performance reporting in one quarter, or to one that recurs over a specified duration such as a calendar year?
 - b) Will recurring contraventions be penalised on a recurring basis, every quarter, and how will the Authority make allowances for operators who are making a concerted effort to address compliance issues?
 - c) Will certain contraventions attract a higher penalty than others? If so, more transparency is needed to inform operators of priority areas where improvements can be made.

- d) Does the Authority intend to use a specific formula for determining and imposing penalties? If so, this formula be made available to all parties involved.

SPECIFIC MATTERS

Schedules

46. Telkom notes that there is no explanation regarding the nature of the schedules attached to the Draft Regulations. It remains unclear as to how they ought to be interpreted in relation to the Draft Regulations. For instance, Schedule 1 refers to measurements as a result of drive tests, however many of the parameters set out in the schedule refer to a range of QoS measures outside the ambit of drive test parameters. These types of inconsistencies and discrepancies need to be resolved prior to any publication of a Service Charter. **Telkom urges the Authority to consider putting the necessary qualification in relation to them which should preferably form part of the Draft Regulations.**

Section 4.1: Availability of Electronic Communications Network Services (ECNS)

Fixed Wireless/Fixed Wireline Services

47. **Telkom opposes the Authority's proposed increase from 95% to 99%.** Whilst the regulations aims to set minimum standards, in Telkom's view this is a maximum standard, which is simply not achievable on a national basis considering Telkom's network challenges and lack of infrastructural development.. Distinctions are required to separate urban from rural areas where a lower percentage in the region of 60% to 70% may be reasonable and therefore attainable in rural and underserved areas. Telkom has previously engaged the Authority at length concerning this matter and is more than willing to engage the Authority further if there is a need.

Mobile Services

48. **Telkom opposes the proposed 99% Network Availability Target** as this may not always be achievable for the following reasons:
- Unstable national power supply grid;
 - Relentless vandalism to its infrastructure;
 - Lack of state security for its staff members responding to network related faults at mobile base station sites; and
 - No clear guidelines on how multi-layered network technologies will be aggregated in the Mobile Service measurements. The problem is exacerbated by the lack of an End-user Subscriber Quality of Service Methodology technical specifications standard.

49. Due to the fact that the abovementioned issues negatively impact the measurement of Network Availability and are beyond the control of network operators, Telkom welcomes engagement with the Authority to establish a more realistic measurement target.

Section 4.2: Availability of Electronic Communication Services

Mobile Services

50. **Telkom opposes of the proposed 95% Service Availability Target** as this may not always be achievable due the reasons stated in the previous section. As a result, Telkom welcomes engagement with the Authority to establish a more realistic measurement target.

Section 4.3: Average Time to Install and Activate Services

51. With regard to fixed networks, the Authority proposes a target of installation rate of 95% within 20 days. This standard does not differentiate between areas with infrastructure and those with limited network coverage. **Telkom therefore proposes a lesser standard of 50% within 180 days for areas with no development and coverage.** The installation target of 95% within 20 days for fixed services will require a drastic increase of the financial and human resources requirements, thereby resulting in additional costs to Telkom. Over and above deploying more resources to install services within 20 days, Telkom will also have to make system changes to accommodate reporting of fixed wireline and fixed wireless separately.
52. With regard to mobile networks, installation targets are nonsensical. Activation targets are more meaningful. **When it comes to activation: 95% within 5 days in respect of the fixed wireless / fixed wireline services.** It is suggested that a few plausible exceptions should be included, namely activation being delayed as a result of the End-User or subscriber not being available to effect activation or activation not being possible because of a prevailing national disaster or unrest in an area. In such instances, the calculation of days should only commence once the difficulties have been cleared.
53. **In respect of mobile services: activation of 99% within 24 hours and quarterly reporting are proposed.** Telkom recommends that the activation of services metric excludes number porting requests, since the operator initiating the porting procedure has minimal control over the process.

Section 4.4: Average Time to Clear Faults

54. It is noted that the Authority proposes a target of 90% fault clearance within three days and quarterly reporting in respect of the fixed wireless / fixed wireline services. **Given our current operating environment, Telkom proposes that this target be revised to 80% within four days in order to accommodate the challenges we are faced with in meeting customers' needs in the rural and remote areas.**

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55. Since Telkom has generally highlighted the problems encountered by fixed network operators, it would like the Authority to consider the following causes for delays in fault repairs:
- a) **Denial of access** to property because the end user is absent from the premises when the field forces arrive;
 - b) **Variations in types of faults**, for example single line faults can be repaired promptly, other repairs are more time consuming because they relate to complex network faults, cable theft, or underground cables which require longer timeframes to repair.
 - c) **Product complexity**, where faults resulting from ADSL services, for instance, are more complex and therefore require longer repair times.
 - d) **Seasonal weather patterns** where a large number of faults are experienced in concentrated areas, primarily from October to February;
 - e) **Legacy network faults** involving older technologies which are more difficult to repair because components are no longer available.
56. Fault clearance targets should reflect the infrastructure that underlies the service(s) from which a fault arises. Accordingly, the same periods for clearing faults cannot be given the same measure or metric as that assumes the same capabilities to all occurring faults, which is predominantly not the case with fixed line services.
57. Telkom strongly opposes this provision as it has been shown to be highly problematic and hardly capable of implementation. Compliance with the Draft Regulations is therefore impossible. The 90% in 3 days target is unrealistic in a number of areas; in particular underserviced and rural areas.
58. Clearance statistics need to be adjusted to account for delays caused by factors that are beyond the control of the field force
59. **Accordingly, to accommodate these challenges, Telkom proposes this target to be set at 80% within four days for overall national performance.**

Section 4.5: Connectivity Failure Rate for Fixed Wireless, Fixed Wireline, Mobile Internet and Broadband Services

60. Telkom notes that the Authority has introduced 17 new QoS metrics in this section without technical justification. Moreover, the Draft Regulations do not specify a suitable measurement methodology for these new QoS metrics. As mentioned earlier, the measurement and reporting of additional QoS metrics significantly increase costs and may result in several unintended negative consequences.

Inter Network Call Connection Loss

61. The Draft Regulations do not specify a measurement methodology for the Inter Network Call Connection Loss. Telkom is therefore uncertain as to how the measurement of this metric will be performed.

62. Furthermore, Telkom questions the technical feasibility of measuring this metric given the difficulties in determining the source of Inter Network Call Connection Loss. Note, a typical Inter Network Call Connection scenario comprises two network operators. As a result, Telkom may be held accountable for the poor QoS of another operator's network. **Therefore, Telkom does not support the utilisation of the Inter Network Call Connection Loss metric.**

Dropped Call Ratio

63. The Draft Regulations propose a target of less than 3% and greater than 96% for the Dropped Call Ratio (DCR) and Call Retention Ratio (CRR) metrics, respectively. However, the proposed target values are not consistent since DCR and CRR share the following mathematical relationship:

$$DCR = 1 - CRR = 1 - 96\% = 4\% \quad (1)$$

64. **In view of the result obtained in (1), Telkom proposes that the target DCR should be revised to less than 4%.**

Average Block Call Rate

65. Telkom notes that the Draft Regulations propose the measurement and reporting of both Dropped Call Rate and Average Blocked Call Rate. However, these metrics are considered equivalent since they both measure the probability of failure once a call has been correctly established.
66. **Therefore, Telkom is of the view that the measurement and reporting of BCR is superfluous and Telkom proposes the suppression of this QoS parameter.**

Service Coverage

67. Telkom does not support the specification of Service Coverage limits in the Draft Regulations, since imposing these excessive limits will hamper network optimisation activities. Telkom questions the validity of the proposed signal strength targets in view of the fact that OFCOM (the UK Communications Regulator) recently conducted a coverage mapping exercise where signal strength thresholds of -92 dBm and -100 dBm were used for 2G and 3G services, respectively.
68. Furthermore, the signal strength varies based on the technology (2G, 3G or 4G) deployed and the specification of a single signal strength value does not reflect real world network deployments.
69. **Telkom proposes that drive tests be performed in areas where operators claim service coverage. In the event, that coverage has been misreported, the concerned operator be penalised accordingly as all service retainability and accessibility tests conducted in that particular area will fail.**

Internet Session Login Ratio

70. Telkom proposes that the definition of Internet Session Login Ratio be amended in order to exclude errors due to the following, which is beyond the control of network operators:
- a) End-users behaviour, i.e. the ability to use the internet services as well as their devices,
 - b) End-users terminal devices related problems
 - c) End-users access to Content Servers and the respective IT infrastructure (Firewalls, etc.)

Delay Ratio

71. Telkom does not support the utilisation of the Delay Ratio metric based on the following:
- a) The Draft regulations do not specify a methodology for the measurement of this metric.
 - b) Delay Ratio is a unit less quantity; however the target value is given in the time domain.
 - c) The service to which this metric applies has not been defined

Other

72. The Draft Regulations do not specify a measurement methodology for several metrics. Telkom is therefore uncertain as to how the measurement of these metrics will be performed. In the absence of such crucial information, Telkom cannot support the utilisation of the following metrics and their associated targets:
- a) Speech Quality;
 - b) Call Handover Success Rate;
 - c) Packet Loss Ratio;
 - d) Latency; and
 - e) Successful Data Transmission Ratio.
73. **Telkom strongly urges the Authority to develop a suitable methodology and include same in the next revision of the Draft Regulations.**

Section 7.2: Billing

74. Telkom notes that provision 7.2 b proposes the inclusion of the websites visited in billing statements. However, provision of this information will require inspection and filtering of the data transmitted by customers, thus violating privacy rights. These rights are not only constitutionally enshrined but also protected in various Government statutes.

75. Therefore, Telkom strongly opposes the listing of websites visited in billing statements. Furthermore, Telkom is of the view the specification of specific website URLs is not necessary given that an Internet session can be adequately described by the following:

- a) Date of Session;
- b) Time of Session Commencement; and
- c) data consumed in a particular internet session.

Section 8.3: Responding to the Authority

76. The Draft Regulation propose that the licensee acknowledges receipt of complaints escalated by the Authority within 24 hours. Telkom advises that this period is extremely short and will in all likelihood result in non-compliance. Telkom proposes relaxing this target to 3 business days.

Section 8.4: Remedies Applicable

77. Telkom would like to highlight that there is no legal basis, in terms of the statues that the Authority administers, which permits the use of Alternative Dispute Resolution (“ADR”).

78. As such, Telkom the Authority to make the use of Alternative Dispute Resolution (ADR) a voluntary election by the parties to the dispute. If one or both parties do wish to make use of it, the unresolved dispute should simply be referred to the CCC as statutorily provided in the laws that ICASA administers.

79. Accordingly, 8.4 i. should be amended as follows:

The Authority may make use of Alternative Dispute Resolution (ADR) as a mediation process aimed at addressing complaints. If one or both parties object to the use of ADR, the unresolved complaint must be referred to the CCC for investigation and adjudication in terms of the ICASA Act of 2000.

Section 10: Rebates

80. The rationale underlying the proposed rebates, prescribed in the Draft Regulations, appear excessive and disproportionate. **Telkom proposes that these be properly aligned to the service day(s) or period lost or it could easily amount to illegally enriching a customer and may be subject to abuse by customers to the disadvantage of the licensees.**

81. In addition, Telkom questions the feasibility of implementing the proposal for Dropped Call Rebates given the complexities of determining the source of the dropped call. Telkom recommends that the Authority provide greater detail regarding the implementation of the Dropped Call Rebate, specifically addressing the scenario where calling parties utilise the network services of different operators. **In the absence of the above mentioned information, Telkom cannot support the proposal for a Dropped Call rebate.**

Section 11: Vis Majore

82. Telkom notes the vague and potentially onerous nature of provision 11a in the Draft Regulations, given that this provision does not specify the minimum period after which a network outage should be reported. In order to facilitate the implementation of provision 11a, **Telkom recommends that network outages should be reported on condition that the service has not been available for more than 12 hours. This proposal will serve to mitigate undue reporting of network glitches.**

Section 14: Reporting and Publication

83. It is noted that the Authority proposes quarterly reporting in respect of monitoring. This period may be administratively cumbersome. **Telkom urges the Authority to consider a bi-annual report in this regard.**
84. It is noted that the Authority proposes print and broadcast media reporting. Telkom objects to this proposal as it will have untold cost implications for licensees. Telkom suggests that the Authority require a licensee to furnish a list to any customer or person requesting such via an email free of charge, or make the list available to the requestor in the form of a hard copy for a reasonable fee per copy.

CONCLUSIONS

85. As indicated above, Telkom welcomes the publication of the Draft Regulations but wishes to prevail on the Authority to revise these proposed minimum service standards contained in the Draft Regulations taking into account the unique situations of the licensees concerned. In so doing the revised regulations will be less problematic, and will be capable of implementation.
86. In particular, Telkom proposes that reducing the regulatory obligations through decreasing the number of metrics measured and the relaxation of QoS targets provide suitable mechanisms for averting the potential risks posed by the Draft Regulations.
87. In addition, the establishment of a measurement and drive test methodology, the shift to bi-annual reporting and the substantial review of the Draft regulations, are crucial for the development of workable Regulations
88. Telkom is committed to further engagement with the Authority regarding its submission, with a view of producing effective Regulations that serve to benefit both industry and end-users.