Addendum No. 1

February 6th, 2026

REVIEW OF QUALITY OF MOBILE QoS FRAMEWORK MEASUREMENTS OF MOBILE TELECOMMUNICATIONS SERVICES

Please refer to the proposed QoS Framework review published in my.gov on January 13th, 2026 and in our CA website via https://www.ca.go.ke/open-consultations.

The Authority wishes to make arithmetic corrections on table 6 and table 9 of the proposed framework as follows:

Table 6: E2E Mobile KPI Weighting

Service	KPI Hierarchy	Parameter	Technology	Service Target	Weight of Service (Data or Telephony or SMS (%)	Weight in Service (%)	Weight in Technology (%)	Overall Weights	Worst Acceptable Limit	Excellent Target	Comments / Rationale
Telephony (Voice)	Accessibility	Unsuccessful Call Ratio	All	≤ 4%	50	25	100	12.5	5	0.5	Key indicator of call success; applies to all technologies; high weight due to criticality of voice services in rural areas.
		Call Setup Time	2G, 3G, 4G (CSFB)	≤ 7s	50	10	50	2.5	10	4	Reflects user-perceived delay in legacy technologies; moderate weight since fallback use dominates.
			VoLTE	≤ 3s	50	10	40	2	4	1.5	Faster call setup on 4G; lower technology weight reflects mixed adoption of VoLTE.
			5G SA (VoNR)	≤ 2s	50	10	10	0.5	3	1.5	5G still limited in coverage; technology weight low.
		Call Setup Time > 15 s	All	< 3%	50	5	100	2.5	3	0	Prolonged delay falling outside expected responsiveness for call initiation
	Retainability	Drop Call Rate	2G, 3G, 4G	≤ 2%	50	30	90	13.5	3.5	1	Measures call continuity; high weight for main technologies.
			5G SA (VoNR)	≤ 2%	50	30	10	1.5	2	0.5	Low technology weight due to limited 5G deployment.
		Handover Success Rate	All	≥ 98%	50	5	100	2.5	95	99	Ensures seamless mobility across cells; moderate weight in service and overall.
	Integrity	Voice Quality (MOS, POLQA)	2G, 3G, 4G	≥ 3.5	50	20	90	9	3	4	Reflects perceptual call quality in main technologies.
			5G SA (VoNR)	≥ 4	50	20	10	1	3.5	4.3	Lower tech weight due to limited coverage.

		Voice Quality (MOS < 1.6, POLQA)	All	< 10%	50	5	100	2.5	10	0	Extremely poor, outside expected voice quality
SMS	Retainability	Completion Rate for SMS	All	≥ 98%	5	70	100	3.5	95	99	SMS reliability important but limited usage; low service weight.
	Integrity	End-to-End Delivery Time for SMS	All	≤ 5s	5	30	100	1.5	15	3	Time-critical SMS services; low service weight.
Data	Accessibility	EN-DC Setup Success Rate	5G (NSA)	≥ 99%	45	10	100	4.5	98	99.5	Critical for initial 5G data connectivity; moderate weight in service.
	Retainability	Download Transfer Failure Ratio	All	≤ 8%	45	15	100	6.75	13.5	3	Reflects successful data transfer; high weight for data-intensive users.
		Upload Transfer Failure Ratio	All	≤ 8%	45	10	100	4.5	13.5	3	Captures reliability of uplink data; moderate weight.
		HTTP Completion Failure Ratio	All	≤ 5%	45	10	100	4.5	11.5	2	Reflects web service reliability; moderate weight.
	Integrity	Latency	2G, 3G	≤ 100ms	45	25	30	3.375	250	80	Critical for user experience on legacy networks; low tech weight reflects legacy coverage.
			4G	≤ 80ms	45	25	60	6.75	100	40	4G latency more relevant; higher tech weight due to adoption.
			5G SA (VoNR)	≤ 10ms	45	25	10	1.125	25	8	Lower tech weight for limited 5G coverage.
		Jitter	4G	≤ 70ms	45	10	90	4.05	80	30	Important for streaming; high tech weight in 4G.
			5G SA (VoNR)	≤ 30ms	45	10	10	0.45	40	15	Limited coverage; lower tech weight.
		Packet Loss Ratio	4G	≤ 0.1%	45	10	90	4.05	1	0.1	Critical for high-quality data services.
			5G SA (VoNR)	≤ 0.1%	45	10	10	0.45	0.5	0.1	Lower tech weight due to 5G deployment stage.
		HTTP Completion Time	All	≤ 5s	45	10	100	4.5	8	2	Ensures overall web performance; moderate weight.
		Download throughput	Informational KPI – No defined threshold								Monitored for reference; no defined threshold.
		Upload throughput									
Total Score								**100**			

Table 9: NP QoS KPI weighting

KPI Area	Proposed KPI	Technology	Excellent Limit (%)	Worst Limit (%)	KPI Area Weight (%)	KPI Weight (%)	Tech. Weight Factor (%)	Overall Weight	Justification for the Weight
Availability	Cell Availability	All	≥99.95	≤99.5	15	100	100	15.00	A foundational KPI ensuring the network is operational. Since this metric applies across all technologies and geographic areas, it receives the full weight of its area (15%). Failure here implies widespread service collapse.
Accessibility	Call Setup Success Rate (CSSR)	2G	≥98.5	≤95.0	35	35	35	4.29	Measures the success of initiating the most basic voice service. Receives lower weighting (4%) than 4G/VoLTE, reflecting the technological shift away from 2G as the primary voice bearer, but remains necessary for rural coverage and fallback situations.
		3G	≥98.5	≤95.0	35	35	25	3.06	Measures success in initiating voice service on 3G. Receives the lowest weighting (3%), reflecting 3G's role as a transitional or secondary voice/data network, de-emphasizing investment here compared to 4G/5G.
		4G (VoLTE)	≥98.5	≤95.0	35	35	40	4.90	This is the modern, high-quality standard for voice service. It receives the highest weight among direct CSSR metrics, emphasizing the MNO's responsibility to deliver the best voice experience on the latest technology.
	CS Fallback Success Rate (CSFB SR)	2G/3G	≥98.0	≤94.0	35	25	100	8.75	This KPI ensures users on 4G can successfully initiate a voice call by falling back to 2G/3G. Its high weight reflects its critical role in the user experience of all 4G devices that haven't fully implemented VoLTE, guaranteeing call start success.
	Session Setup Success Rate (SSSR - Data)	4G (E-RAB)	≥99.0	≤96.0	35	25	100	8.75	Measures the user's ability to establish the primary data bearer (E-RAB) for the main mobile broadband technology (4G). The high weight reflects the importance of successful data access, which is the key service provided by 4G.
	NSA Access Success Rate (SgNB Addition SR - Data)	5G (NSA)	≥98.0	≤95.0	35	15	100	5.25	Measures the ability of the 4G anchor to successfully connect to the 5G carrier (SgNB). Its moderate weight reflects the MNO's commitment to successfully launching new 5G service, though 4G E-RAB is currently prioritized due to traffic volume.
Integrity	Call Drop Rate (CDR)	2G, 3G	≤1.0	≥3.0	15	70	60	6.30	A dropped call is a critical failure. The high weight for 2G/3G reflects that, while these technologies are aging, a high number of drops severely impacts older user experience and service perception in basic coverage areas.
		4G (VoLTE)	≤1.0	≥3.0	15	70	40	4.20	A dropped VoLTE call is an outright failure of the premium voice service. The high weight ensures MNOs prioritize the stability of their modern voice solution, which consumers expect to be flawless.
	SRVCC Handover Success Rate	4G (VoLTE)	≥98.5	≤95.0	15	30	100	4.50	This KPI directly measures the success in preventing a critical drop when a VoLTE call moves out of 4G coverage. Its weight highlights the importance of seamless continuity and stability for high-value VoLTE calls.
Mobility	Inter-/Intra-RAT Handover Success Rate	All	≥98.0	≤95.0	5	100	100	5.00	Measures the user's ability to move between cells/technologies without interruption. As a foundational layer, it receives the full weight of its area (5%), reflecting its necessity for a functional, contiguous network.
Retainability	Data Service Drop Rate	3G, 4G	≤1.0	≥3.0	15	100	60	9.00	A terminated data session is a major source of customer frustration and is a critical failure of the primary 4G data service. The high weight ensures MNOs invest in the stability and retention of their core broadband connections.

		5G (NSA)	≤1.0	≥3.0	15	100	40	6.00	Measures the drop rate for the new 5G bearer. Its moderate weight pushes MNOs to ensure the new technology is stable, though 4G/3G retainability still covers a higher volume of current traffic.
Spectrum Utilization	Traffic Channel (TCH) Congestion Rate	2G	≤0.5	≥2.0	15	30	100	4.50	High congestion indicates inefficient use of 2G spectrum. Its weight encourages MNOs to maintain sufficient 2G capacity or aggressively migrate traffic to newer networks.
	Radio Access Bearer (RAB) Congestion Ratio	3G	≤1.0	≥3.0	15	30	100	4.50	High congestion indicates insufficient resources on the 3G layer. Its weight emphasizes the need for capacity maintenance in transitional 3G areas.
	Downlink Physical Resource Block (PRB) Utilization	4G	≤75	≥90	15	30	100	4.50	This metric allows the regulator to monitor network load before it leads to failed sessions or drops. Its weight encourages proactive capacity planning in the high-demand 4G network.
	NR Downlink PRB Utilization	5G (NSA)	≤80	≥95	15	10	100	1.50	Measures the load on the new 5G spectrum. Its low weight reflects that 5G traffic volumes are still low, but its inclusion ensures the regulator is monitoring the deployment and utilization of the new spectrum.
Total								100	

ALL other sections of the document remain unchanged.