ADDENDUM ANNEX 8 : LOT 1-CATEGORY-2—TOR Unified-Portal-and-Customer-Relationship-Management-System -QUEUE MANAGEMENT SYSTEM BILL OF MATERIAL (BOM)
ELECTRONIC QUEUE MANAGEMENT SYSTEM ITEM NO. 7.0 (TORS)
Prioritized Stations - Phase 1

NO.	ITEM	Specifications	Description	Times Tower Banking Hall	Sameer Park	Times Towers Tall Tower Wing	CBC - Ushuru Towers	Mombasa	Malindi	Nyeri	Thika	Embu	Machakos	Kisumu	Kisii	Nakuru	Naivasha	Eldoret	Kitale	Total
1	Central QMS Server (On Premise)	**Application** • Minimum CPU: 4 × Intel Xeon Gold / AMD EPYC minimum 16 cores • RAM: Minimum 64 GB • Storage • OS: Minimum RAID-1 NVMe SSD • Form Factor: Rackmount with kit • Power Sully: Dual Power supply • Network:Dual-Port 10/25GbE Adapters • Virtualization: VMware / Hyper-V / Proxmox (for scalability) **Database server** • Minimum CPU: 4 × Intel Xeon Gold / AMD EPY minimum 64 cores • RAM: Minimum 64 GB • Database: Minimum RAID-10 SSD/NVMe o Redundancy: • Dual power supply • RAID controller with cache • Support multiple NVMe drives o Virtualization: VMware / Hyper-V / Proxmox (for scalability) • Network:Dual-Port 10/25GbE Adapters • Form Factor: Rackmount with kit	This will run the QMS application, database, reporting engine, APIs, and integrations (CRM, HIS, ERP, SMS gateways, etc.).																	
2	Ticket Issuance KIOSK with Printers	The system should allow customers to take tickets, select services, scan IDs, or book appointments (Stand-alone Kiosks)	**Display** • 15"–22" Touchscreen • Capacitive (preferred over resistive) • Brightness: ≥ 300 nits **Processing Unit** • Intel i5 (minimum) or ARM-based industrial SoC • RAM: minimum 8 GB • Storage: minimum 128 GB SSD **Printer** • Thermal printer • Paper width: 80 mm • Auto-cutter • Speed: ≥ 150 mm/sec **Connectivity** • Ethernet (preferred) • Wi-Fi (backup) • USB ports (scanner, camera) **Additional Modules** • QR / Barcode scanner • NFC / RFID reader • ID card / Passport scanner • Camera (for facial recognition) • Microphone + Speaker (voice guidance) **Enclosure** • Steel body • Lockable • ADA-compliant height (if required)	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	

#	Item	Description	Specifications	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	Total
3	Queue Display Screens (Customer Information Displays)	The Display screens should show ticket numbers, counters, messages, and multimedia content.	**Display Types** • LED TVs • Commercial Digital Signage Display **Specifications** • Size: 65" • Resolution: Full HD (minimum), 4K (preferred) • Brightness: ≥ 400 nits • Orientation: Landscape / Portrait • Bezel: Thin bezel preferred **Media Player** • Android digital signage player • Built-in SoC **Connectivity** • HDMI • Ethernet / Wi-Fi	2	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	20
4	Counter / Agents Workstations	Used by service staff to call, transfer, hold, and complete tickets.	**Hardware** • Desktop PC **Specifications** • CPU: Intel i5 (mimimum) • RAM: 8 GB • Storage: 256 GB SSD • Display: 22" monitor (dual monitor recommended) • Input: Keyboard + Mouse • Audio: Speaker or headset (for voice callouts)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5	Counter Call Devices	Quick ticket calling	**Required control types** • Hardware call buttons, Touch keypads or/and Tablet-based controller **Connectivity** • USB • Ethernet • Wi-Fi **Typical Buttons** • Call Next • Recall • Transfer • No-Show • Complete	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	As per the number of counters	
6	Audio Announcement System	The system must announce ticket numbers audibly across waiting areas.	**Components** • Network-based amplifier • Ceiling or wall speakers • Microphone **Specifications** • Amplifier: IP-based (PoE preferred) • Speaker Power: 10–30W per zone • Zones: Configurable (waiting hall, VIP etc.) • Integration: SIP / API / IP audio	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	Networking Infrastructure	(CAT 6A UTP ETHERNET CABLE & CAT 6A DUAL DATA OUTLETS)	**See attached network specifications**																	C:\Users\K00006995\Desktop\CTP\Cable
8	Power & Environmental Hardware		**UPS** • Central server UPS (online, SNMP enabled) • Kiosk-level UPS **Power Protection** • Surge protectors • Power conditioning for kiosks Environment • Dust-resistant kiosk enclosures																	
9	Other Requirements	For Smart / AI-Driven QMS	• AI camera (people counting, wait-time prediction) • Facial recognition terminals **Accessibility** • Braille keypad • Audio-only ticket dispenser • Height-adjustable kiosks Self-service check-ins to be supported	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Estimated Numbers = 300

#	Item	Specification	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	Total
10	Computer for KIOSK (covered under Smart Kiosk software)	1 per station	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
11	Smart KIOSK Software	1 per station (scalable) - 52 stations	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
12	LED CDU Centrally Powered with mounting rods	1 per counter	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Estimated Numbers = 300
	No. of Counters/Desks		Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Estimated Numbers = 300
13	Active Hub & Central Power Supply (This will be software, not a hardware)	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
14	Software for EQ – Active Controller	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
15	Thermal Paper Roll 60MM –Packets (50 rolls per packet)	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
16	Audio Speaker System	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
17	LCD Controller (This is a software not a hardware	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
18	LCD SDU-L-Shape Software (This is a software covered on LCD Controller)	1 per station (No of stations is 52 but scalable)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
19	Software Teller Station Units - Windows	1 per station (No of stations is 52 but scalable)	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Estimated Numbers = 300
20	Central EQ Reporting Software License: • 52 Service Centres • 1 Central Management • 1 ICT Support	1 hosted at HQ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
21	LCD 65" • Each Service Centre • 1 Central Management	1 per station (52 stations scalable) 3 Extra at Times Towers, Sameer and Forodha House Mombasa 1 hosted at HQ	3	3	3	2	3	1	1	1	1	1	1	1	1	1	1	1	20
22	Feedback Station	1 per counter	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Numbers to be based on the provided estimates on this worksheet	Estimated Numbers = 300
23	TRAINING AT • ALL 52 SERVICE CENTRES • Project Implementation Team • 20 - SUPPORT STAFF																		

| 24 | Installation at all service centres/TSOs and any other prioritised service point | Installation to begin with the prioritized stations (Phase 1)
Times Tower - Banking Hall & Tower Wing
Sameer Park
CBC -Ushuru Towers
Mombasa
Malindi
Nyeri
Thika
Embu
Machakos
kisumu
Kisii
Nakuru
Naivasha
Eldoret
Kitale

Phase 2: All remaining Stations | | | | | | | | | | | | | | | | | |
| 25 | Support and Maintenace (As per the bid document) | | | | | | | | | | | | | | | | | | |

Stations to be considered within the scope of implementation

Regional Offices

Region	HQS
Region	**HQS**
Nairobi	Times Towers
Southern	Mombasa
Western	Kisumu
North Rift	Eldoret
South Rift	Nakuru
Central	Nyeri
Northern	Embu

Important Note:	
No. of Stations	52 (scalable)
No. of Counters/Desks	Estimate: 300 Scalable

Project to be implemented in a phased manner	
Phase 1	Prioritized stations
Phase 2	All the remaining stations

Times Tower Cluster

1	Banking hall service centre	10
2	City square huduma centre	3
3	GPO huduma centre	3
4	Keninvest	1
5	Parliament	1
6	UNON	2

Ushuru Cluster

1	Admins	1
2	Ushuru Service centre	5
3	Kibra Huduma Centre	2
4	Ministry of Lands Desk	1
	Total	**9**

Sameer Cluster

1	Sameer Service centre	6
2	Makadara Huduma Centre	2
3	Eastleigh Huduma Centre	2

North Rift Region Cluster

	Admins	5
1	Eldoret Service Centre	5
2	Eldoret Huduma Centre	2
3	Kitale Service Centre	3
4	Kitale Huduma Centre	2
5	Lodwar Service centre	2
6	Turkana Huduma centre	2
7	Lokichogio service Desk	2
8	Kakuma Huduma centre	1
9	Kakuma Service centre	2
10	Kapenguria Service centre	2
11	West pokot Huduma centre	2
12	Iten Service centre	2
13	Elgeyo Marakwet Huduma centre	2
14	Kabarnet Service centre	2
15	Baringo Huduma Centre	2

Western Region Cluster

	Admins	4
1	Kisumu Service Centre	5
2	Kisumu Huduma Centre	2
3	Kisumu West Huduma Centre	1
4	Kakamega Service Centre	3
5	Kakamega Huduma Centre	2
6	Bungoma Service Centre	2
7	Bungoma Huduma Centre	1
8	Migori Service Centre	2
9	Migori Huduma Centre	1
10	Kisii Service Centre	3
11	Kisii Huduma Centre	2
12	Busia Service Centre	2
13	Busia Huduma Centre	1
14	Siaya Service Centre	2
15	Siaya Huduma Centre	1

Northern Region Cluster

	Admins	5
1	Chuka Huduma Centre	1
2	Chuka Service Centre	2
3	Embu Huduma Centre	2
4	Embu Service Centre	4
5	Garissa Huduma Centre	1
6	Garissa Service Centre	2
7	Isiolo Huduma Centre	2
8	Isiolo Service Centre	2
9	Central Huduma Centre	2
10	Service Centre	4
11	West Huduma Centre	1
12	Kitui Huduma Centre	2
13	Kitui Service Centre	3
14	s Huduma	2
15	Machakos Service Centre	3

	Total	**10**
1	**Central Region Cluster**	
	Admins	4
2	Nyeri Service Centre	5
3	Nyeri Huduma Centre	2
4	Thika Service Centre	6
5	Thika Huduma Centre	2
6	Kamwangi Huduma Centre	1
7	Muranga Service Centre	3
8	Muranga Huduma Centre	1
9	Kerugoya Service Centre	3
10	Kerugoya Huduma Centre	1
11	Kiambu Service Centre	3
12	Nanyuki Service Centre	3
13	Laikipia Huduma Centre	1
14	Laikipia East Huduma Centre	1
	Total	**32**

16	Eldama Ravine Service centre	2
17	Mogotio Huduma centre	2
18	Kapsabet Service centre	2
19	Nandi Huduma centre	2
20	Biashara Centre (KEBS)	1
	Total	**42**
	South Rift Region Cluster	
	Admins	4
1	Nakuru Service Centre	5
2	Nakuru Huduma Centre	2
3	Naivasha Service Centre	4
4	Nyahururu Service Centre	3
5	Maralal Service Centre	2
6	Maralal Huduma	1
7	Ol kalou/ Nyandarua	2
8	Kericho Service Centre	4
9	Kericho Huduma	2
10	Narok Service Centre	3
11	Narok Huduma	1
12	Bomet Huduma	2
		31

16	Homabay Service Centre	2
17	Homabay Huduma Centre	2
18	Malaba Service Centre	2
19	Mbita Service Centre	2
20	Isebania Service Centre	2
21	Vihiga Huduma Centre	1
22	Nyamira Huduma Centre	1
		42
	Southern region cluster	
	Admins	4
1	Mombasa Service Centre	6
2	Huduma Centre Mombasa	3
3	Diani Service Centre	3
4	Huduma Centre Kwale	1
5	Kwale Tax Service Centre	1
6	Voi Service Centre	3
7	Huduma Centre Wundanyi	2
8	Huduma Centre Kilifi	2
9	Kilifi Tax Service Centre	1
10	Huduma Centre Tana River	1
11	Tana River Tax Service Office	1
12	Malindi Service Centre	3
13	Huduma Centre Lamu	2

16	Makueni Huduma Centre	2
17	Wote Service Centre	2
18	Marsabit Huduma Centre	1
19	Mandera Huduma Centre	0
20	Meru Huduma Centre	2
21	Meru Service Centre	3
22	Maua Service Centre	1
23	Service Centre	2
24	Huduma Centre	1
25	Wajir Service Centre	1
26	a Huduma	1
27	Maara Huduma Centre	1
28	Marimanti Huduma Centre	1
		51

14	Lamu Service Centre	2
	Total	**31**