

Clarifications Number Five (5):Tender No. PA/001/2018-19/HQ/W/031				
Tanzania-Zambia Transmission Interconnector Project (TaZa); Design, Supply, Installation, Implementation, Training and				
Item No.	Page Number	TANESCO Technical Specification/Document File	Clarification Required	TANESCO Response
1	Page 322, Page 323, Page 346	1- Software warranty will be effective upon operational acceptance for a period of 36 months. As different modules commissioning will vary, this should be adjusted accordingly to align to the agreed implementation schedule. 2- Hardware warranty will be effective upon hardware commissioning for a period of 36 months. As different components/ environments commissioning will vary, this should be adjusted accordingly to align to the agreed implementation schedule. 3- The post-warranty support for hardware and software will not be included in this contract. However the bidder must provide costing for post-warranty for (3) three years support for informational purposes, based on the same SLAs as defined for Warranty support. Same for T-SR-2, T-SR-3, T-SR-11	For HW Warranty and as per mentioned statements, 3 years Warranty from HW deployment & Commissioning Followed by 3 years post warranty to be quoted but not to be part of budget proposal (Total will be around 6 years and it is aligned with recurring cost schedule). For SW, Warranty usually start from date of purchasing of similar international standard software to be able to use them (even under development phase). In case development will take one year for subsystem1 (RMS) and 2 years for subsystem2 (CoMS and TSMS), and since the warranty shall be 36 months from operational acceptance; shall we quote warranty for 1 + 3 Years for subsystem1 and 2 +3 Years for subsystem2? Or do we consider that we have to quote Warranty for 3 years from Project start time T0. And since post warranty is needed for 3 years and if option 1 is needed, shall we quote optionally for 3 years after the 4 years for subsystem1 and after the 5 years for subsystem2 which total in 7 Years for subsystem1 and 8 Years for subsystem2 which is not aligned with recurring cost schedule listing the licenses for 6 years. Please advise.	Warranty should be effective upon operational acceptance for a period of 36 months for respective components. Post warrant support for hardware and software will not be included in this contract. However the bidder must provide costing for post-warranty for (3) three years from the time warranty support ends
2	Page 20	ITB 20.4 In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another substantially similar format approved by the Purchaser prior to Bid submission . In either case, the form must include the complete name of the Bidder. The Bid Security shall be valid for twenty-eight days (28) beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 19.2.	With reference to subject above; please note that our corresponding Bank in Tanzania (Citibank), would like to remove the highlighted paragraph in the enclosed Bid Security template as provided in the bidding documents. Kindly review for approval, as per ITB 20.4. We could not see the highlighted paragraph being referred to. Deleted? [RJM]	ITB clause 20.4 shall not be amended. Bidders shall conform to the provided format.
3	Page 18	17.7 The price of Services shall be separated into their local and foreign currency components and where appropriate, broken down into unit prices. Prices must include all taxes, duties, levies and fees whatsoever, except only VAT or other indirect taxes, or stamp duties , that may be assessed and/or apply in the Purchaser's country on/to the price of the Services invoiced to the Purchaser, if the Contract is awarded.	Kindly advice on the % of the highlighted taxes above in order to apply in our pricing.	For clarification on tax issues bidders are advised to visit the Tanzania Revenue Authority (TRA) website www.tra.go.tz
4		A. ACRONYMS USED IN THE TECHNICAL REQUIREMENTS: RAID, RISC, NIC, SCSI, Ethernet, LAN	There are many terms in the abbreviations list which could not be found in the RFP anywhere else, apart from the abbreviation list. Example - RAID, RISC, NIC, SCSI, Ethernet, LAN. Please suggest if we have missed any other important document which contains details around these technical terms, which we would like to go through.	All documents have been included in the Bidding Document. There is no missing document in the bidding document. Referenced acronyms(RAID, RISC, NIC, SCSI, Ethernet, LAN, etc.) are the same as the Industry Standard acronyms in the information and communication technology (ICT) sector and can be looked up in the relevant technical references.
5		3.4 Supply and Installation Cost Sub-Tables Component no. 2.7 to 2.15 - Dev, Test, training environments	We see that TANESCO is asking for separate hardware cost for dev, test and training environments. Is the bidder really required to provide separate underlying hardware for these non-prod environments or for example only for UAT and rest all can be over same underlying hardware on VMs, logically isolated. Pls. suggest. Generally most non-production environments can share the same underlying hardware like development, training, SIT etc.	Training and Dev environments may use a VM approach. As per requirement T-TS-12, if the bidder determines Virtual Machines (VM) are to be used for DEV, and/or Training environments, sufficient capacity must be provided in the delivered infrastructure.
6		Contact	Please confirm that both Phase 1 and 2 be awarded together, ie NOT in parts and be awarded to a single bidder	This is confirmed
7	222	Sec 3.1	The 4 existing GIS systems, are they the same GIS systems or are they different? Who are the vendors ? can they be exported?	The same GIS system which have been implemented as 4 standalone GIS, which uses PostGre database, can be exported.
8	386	CoMS	We would assume the publishing of utilities bills is to PDF format. Kindly confirm. The printing to oriented paper on high volume printer, address merge, letter sorting are NOT the SOW for the tenderer. Sending of Bills to the individual customers (household and industry) by email or snail mail is NOT the SOW of the Tenderer. Kindly confirm.	Yes, We would assume the publishing of utilities bills is to PDF format. The system should have the ability to connect to network printers to achieve printing of documents, including bills. This should include printers that allow for standard printing functionality e.g. address merging, etc. The system should have the ability to issue customer bills via email. Distribution of physical bills to customers is not the responsibility of the bidder.
9	326	SLA	What is the SLA that is applied to large screens & GNSS handhelds?	See page 336 of the bid document for SLAs.
	326	SLA	Tenders aid SLA does not cover accidents of drones crashing due to weather conditions or human errors. Kindly confirm	The bidder is to provide information on what the warranty will and will not cover. See Bid Document for TANESCO requirements, Section II, Bid Data Sheet(BDS), ITB 16.2(a) page 40
10		T-TS-41	please confirm this is NOT a video camera	Its Camera Image Resolution 24Mpix or above with both functionalities i.e. photographs and videos.
11	308	Technology Specification(T-TS-23)	The required retention is 10 years as per CMS clarification 2, what is the current Database sizes for all the systems, so we can have a sensing of the retention volume per year	The 10 years period is the Maximum. We have various database and some functional areas in this proposed solution do not have a automated system. The bidder can propose the solution based on provided information and growth data provided.
12	Page 242	GIS	as per CMS clarification 2, No 42. the World Fleet, E-Drive Technology solutions are installed in the vehicles. Tenderers will not be integrating to these in-vehicle solutions, but to the backend Database and applications via industry standard methods of web services, XML etc. Kindly confirm	YES
13		General	We shall assume the PCs in Tanesco are in good conditions and tenderers need not supply these OA equipment	Supply of PCs is not part of this bid. However the bidder is expected to provide minimum specification for PCs to ensure performance standards are met as per T-TS-15, page 316
14		Technical	Regarding the integration with already existing systems at Tanesco, We expect cooperation from Tanesco team by available webservices/API access to these systems, or avail database access & database schema, with admin passwords etc. This will include system architecture studies. There will be rework on existing systems for successful integrations. Kindly confirm.	TANESCO confirms its cooperation in the integration activities

15	Page 219, Section 3.1	Geographic Information system (the data capturing into GIS for the Distribution, Generation, Transmission, real estate assets)	Does Tanesco have an available and updated BIM? Is Tanesco expecting a Digital Twin for this solution?	TANESCO does not have BIM. Digital Twin is not necessary for this solution.
16		GIS	can Tanesco provide the KML(s) for the 7 required areas of (Mwanza, Mbeya, Arusha, Dar es Salaam, Coast, Dodoma, Geita) for satellite imagery?	KMLS/shapfile that would provide the extent of the city may be the shapefile of such as distribution network or transmission line, of which can not be provided because one of the assignment of the bidder is GIS data capture. So by giving these information will be like doing what you are supposed to do. We suggest that you can check the boundaries of the cities in the google earth to get the limit/extent of the cities. We believe that every where there will be transmission line coverage, distribution network, power generation plants, Tanesco estate, rural electrification etc.
17		GIS	Is Google Earth's KML a good representation of the 7 required areas ? as we need to know the city limits	Yes through Google Earth's KML you can know the city limits
18		GIS	One of the 7 required areas is the coast. would this be the entire coastline? please confirm	No, is not entire coastline. Coast is a region which is also known as Pwani region.
19		TSMS	The Meter data that is read will be stored in an ODBC compliant database, Kindly confirm.	Clarification is Not clear as there are no meter data in TSMS.
20		GIS	Is there a national geodetic control network organisation that tenderers need to have discussions with?	Ministry of Lands and Settlement is an organisation that supervise National Geodetic Control network
21		Contact	Please confirm that both Phase 1 and 2 be awarded together, ie NOT in parts and be awarded to a single bidder	YES, The scope of Phase 1 And 2 will be awarded to the bidder or JV as proposed solution requirements provided
22	222	Sec 3.1	The 4 existing GIS systems, are they the same GIS systems or are they different? Who are the vendors ? can they be exported?	Existing 4 GIS systems are the same. GECE (Global Energy Consulting Engineers) from India were the vendors. The database can be exported
23		GIS-33	How to understand "to represent the boundary of a 3D object as a single row in a database"?	3D Object may fall under one of the three feature classes i.e. Points, Lines and Polygons. Each feature class should be stored in a table as a single row that used to hold the geometry or shape of each feature.
24		GIS-40	Is there a specific "third party raster store"?	All Raster analytics including third party raster should be stored in Portal host server. The bidder is expected to provide the solution which can provide the required functionality. TANESCO don't have third party raster store.
25		GIS-112	What is the expected "Standard data model" that can fulfill specific requirements of Tanesco?	The bidder is expected to provide the proposed solution which address the requirement. The Standard data model is expected based on the best practice standards on Data Modelling to allow well articulated data representation, to allow business processes optimization, integration etc as part of key key benefits of standard data Model hence best usage of data generated
26		GIS-149	Is it expected that Windows will be part of mobility terminals platform which could be in the form of Tablet?	YES,
27	Section 3.1	Digitization and mapping of CUSTOMER network infrastructure	Is there a rough estimated amount of features in the infrastructure (e.g. a total number of power stations, transmission towers, length of power network, area of the region for digitization, category of land assets/POIs, number of POIs)?	Information provided in the Quantitative data files attached. Please refer section VII: Requirements of information system, Page 379 to 396 of tender document.
28	Clarification Response 04	The detailed Functional Requirements Call Center will be submitted as an Addendum to the bidding Document.	We haven't received the Call Center requirements document along with the clarifications response. Please share.	The Requirements are part of addendum no. 5
29	Field Survey	It is mentioned that we have to do survey for a length of ~114000 KM route.	It will be a hectic task to complete in Phase 1. Please suggest.	Bidders should come up with the solution based on information provided. The GIS solution need to achieve operation acceptance during Phase 1, TANESCO shall start using the GIS solution. It is expected as part of implementation strategy bidder can suggest the reasonable estimated time, in Phase 2 to complete the GIS data Capture based on field work of which TANESCO shall have a mandate to decide , but shall not exceed the 30 months .
30	Field Survey	Field Survey	What support will be provided by TANESCO during field survey?	TANESCO Staff will be attached to the project to guide Contractor during field survey. But the bidder is full responsible to achieve the field survey assignment as part GIS Data Capture of the assignment. Hence should consider all necessary resources as part bidder obligation e.g people, vehicles, necessary materials etc required to achieve the field survey assignment
31	Field Survey	Field Survey	As per the clarification document, accuracy requirement is 1.5 Meter for field survey which means that DGPS technology to be used to achieve the accuracy. This is completely different from Handheld GPS accuracy which generally between 5-10 meters. Please confirm.	This is not true. The bidder is expected to provide the proposed solution as per information provided.
32		Technical: Distribution Quantitative Data	We would need total number of feeders for each 29 regions. Please share.	Column with the number of feeders has been appended in Distribution Quantitative data Table page 380 
33		Field Survey	In case of component like Transformers, Substation equipment which are at height and need special arrangement to collect the information. How TANESCO will help us during data collection. Also some of the equipment will have oil spills and difficult to read the details.	It is Bidder responsibility to carry on field survey as part of GIS data capture and uploading. The bidder is required to perform data collection for all the quantitative data provided & bidder must have the required technique and resources to perform data collection
34		Field Survey	Is it possible to get Generation / Transmission and Distribution S/S locations? This will help in understanding the survey geography and further effort estimation.	The information to help in understanding the survey geography and estimation is provided in quantitative data folder. Please refer section VII: Requirements of information system, Page 379 to 396 of bidding document.
35		Field Survey	Did TANESCO define any specification of GCP (Ground Control Points) in terms of demarcation on ground, accuracy, designing GCPs etc.	For Transmission projects TANESCO use First order Control points while for Distribution projects Second order control points are used

36		Field Survey: General: Survey is part of the scope of the bidder responsibility to ensure all quantitative data provided are captured as per requirements provided .	We feel, Field Survey is not a usual ask from Customer to IT companies. Could you please elaborate on the exact expectations from the bidders?	This is the business Transformation Project, which is expected to turn around the efficiency of the organization. The scope of work for GIS is clearly stipulated in bidding document and bidder is required to have the capability to fulfill the Requirement of the bidding document , please refer page 223 of the bidding document
37	T-SR-27	The System MUST have the mirroring capabilities of data to at least two remote locations.	Please elaborate on this requirement. Are there 3 sites at which the datacentre infrastructure needs to be established? Our understanding is of only 2 sites - DC & DR, is there any 3rd site like Near DC or Near DR? Is this storage replication capability requirement?	Yes System MUST have the mirroring capabilities of data at both level Storage Replication Capability etc Establishment of 3rd site is part of our future plans, currently we have only two site i.e. DC and DR.
38	2. TANESCO Systems	The operating environment is based mainly on Linux based operating systems for servers	For GIS and other Non-ERP workloads/VMs, can the bidder propose non-Linux operating systems like windows etc, or only Linux VMs/servers to be proposed.	YES
39	308	Section: VII – Requirements of the Information Systems / Item: T-TS-44	What is the area of interest AOI of “coast region” , it will be preferable if you can share a sketch showing the borders of it	Coast is a region which is also known as Pwani region, sketch showing the borders attached. Boarder in blue
40	3.4 Supply and Installation Cost Sub-Tables	Component no. 2.7 to 2.15 - Dev, Test, training environments	We see that TANESCO is asking for separate hardware cost for dev, test and training environments. Is the bidder really required to provide separate underlying hardware for these non-prod environments or for example only for UAT and rest all can be over same underlying hardware on VMs, logically isolated. Pls. suggest. Generally most non-production environments can share the same underlying hardware like development, training, SIT etc. Clarification on the clarification issued: Ok, we understand on Prod, DR and Test. So, Can the bidder consolidate/merge the training and development environment hardware like servers, storage & accessories and provide a common environment for development & training activities. The underlying infra will be common however each environment will be isolated logically. <u>Pls. suggest if the consolidation approach is acceptable to TANESCO or even Development and training need on separate infrastructure of their own</u>	TANESCO previous clarification response: YES, PROD, DR , TEST are required to be separate Hardware (Servers & Storage systems). TEST (UAT) should be replica of PROD environments. Also Both PROD and DR must meet high availability requirements for both Servers, Storage systems, accessories . Training and DEV environments need not be replicas. Current Clarification response: <u>For Development and Training environments Bidder can provide Consolidation or separate approach depending on the proposed, if VMs used hence appropriate sizing needs to be complied accordingly</u>
41	T-TS-31 & 32	(On site Storage High Availability, for both storage level to be provided)	Can you please elaborate on this point? What is meant by 'high availability' here for on site storage and 'both storage level'? Current clarification based on previous clarification response: We request TANESCO to relook at this requirement of additional storage system replica as HA for production environments at DC & DR. Generally One Storage system solution with inbuilt controller level redundancies and disk RAID5 is sufficient to create Storage components availability and also meet the 99.982% availability for PROD at DC & DR sites. Pls. relook at revise.	Previous clarification response: Bidder is expected to provide high availability for PROD and DR, It is expected that the bidder to provide separate storage systems for PROD, DR with high availability for each Physical storage system provided. Hence separate Enterprise Storage systems are expected to be provided as part of High Availability at Storage system level. e.g If N Storage System are required for DC Storage System Sizing requirements hence we expect the bidder to provide the replica storage system to address the High Availability between the N Storage System as the redundancy etc. Current Clarification Response: The bidder is required to comply with requirements provide and the High Availability clarification above. Also as per requirements High Availability is expected at Servers, accessories for both PROD at DC&DR
42	clarification response 4	Regarding GIS user count in clarification 4 we have received two responses (no.52 and No.100). which one we have to consider?	In clarification response 4 , no52. talks about bidder can proposed appropriate proportionate of total 750 concurrent users, however no100 response provided exact count of read/write/mobile/web. please clarify which we can consider? is it ok if we consider optimal users and meet GIS 750 concurrent count?	YES, You can consider Optimal users and meet GIS 750 concurrent count as stipulated for effective solution implementation and usage. Note: Ignore the breakdown provided in previous clarification number 4 on the same ,
43	Page 219, Section 3.1	Data capturing into GIS for the Distribution, Generation, Transmission, real estate assets provided quantitative data apart from those captured in the existing 4- standalone GIS database	Since 4 GIS databases are already developed, can you share detailed scope of survey & mapping document based on these 4 regions work. Also requested to share contact details of vendors who were involved in survey & mapping for these 4 regions to build GIS database.	Bidder is expected to provide the proposed solution based on the requirements provided for current scope of work.
44	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Can you please confirm whether Routers are required for Internet and WAN connectivity?? Is it to be included as part of bidder's scope? Can we leverage Tanesco's Routers in case it is already in place?	The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution.
45	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Please confirm Same set of routers and WAN architecture to be replicated in DR?Is it part of bidder's scope?	The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution
46	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Please specify Number of routers required for WAN connectivity for Internet, TTCL, SATCOM, TANESCO Fiber and Aggregators as per the service provider	The bidder must provide minimum specification requirements for network infrastructure based on their proposed solution. TANESCO currently has network infrastructure in place as per information provided in bid document. It is expected that new purchases may be required. TANESCO will source the infrastructure improvement recommendations under separate bidding process.
47	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	As per the architecture in the RFP, is all the WAN and internet links expected to pass through the firewall?	YES
48	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	can you please let us know the Minimum ports and port speeds required on each routers	The bidder must provide minimum specification requirements for network infrastructure based on their proposed solution. TANESCO currently has network infrastructure in place as per information provided in bid document. It is expected that new purchases may be required
49	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	All the ports required are RJ-45 or else, please specify as its dependent on your ISP connectivity.	The bidder must provide minimum specification requirements for network infrastructure based on their proposed solution. TANESCO currently has network infrastructure in place as per information provided in bid document. It is expected that new purchases may be required
50	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Are we considering any NO for monitoring the network . Please specify the ports to be considered for the same if required.	T-SR-12 requires the bidder to describe the availability monitoring capabilities of the proposed solution (e.g. alerts, etc.). The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution.

51	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Since Data replication will take place between DC and DR, is there any connectivity available for the same and what is the existing bandwidth?	The bidder must provide minimum specification requirements for network infrastructure based on their proposed solution. TANESCO currently has network infrastructure in place as per information provided in bid document. It is expected that new purchases may be required
52	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	Branch side routers and switches are already in place and excluded from the scope? Network scope is only at the DC and DR. Please clarify?	The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution
53	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	We assume that Branch side connectivity will be taken by Tanesco team. Can you confirm on the assumption?	The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution
54	B. INFORMATIONAL MATERIALS	Existing Information Systems / Information Technologies Relevant to the Information System	As Tanesco is using its existing application with the WAN, will it involve migration from existing infrastructure by having some downtime allocated or we will be provided with separate set of ISP links?	YES, TANESCO has High Availability links at DC and DR, Hence it is expected that vendor will use one of the link available during migration to downtimes. Also shall propose as well as part of migration strategy the needs required so that are addressed accordingly.
55	Page 305	2.0 Technology Specification S/N -T-TS-20	As we understand, same ISP links would be used by Tanesco. Bidder just needs to provide the revised bandwidth sizing at DC, DR, HO(Ubungo), Regional and power plant offices, Districts, Power station and substation offices. Please clarify	The bidder is not required to supply network infrastructure and platforms. However the bidder must provide minimum specification requirements for network infrastructure based on their proposed solution
56		General	please provide the number of Regional and power plant offices? This is required for DC/DR Bandwidth sizing	Please see bid document Section VII B - Site Table
57		General	please provide the number of Districts, Power station and substation offices ? This is required for DC/DR Bandwidth sizing	Please see bid document Section VII B - Site Table
58	Page 219, Section 3.1	Data capturing into GIS for the Distribution, Generation, Transmission, real estate assets provided quantitative data apart from those captured in the existing 4- standalone GIS database	Please provide 4 GIS database details such as database format, Schema & Structure of database, Layers & attributes structure, Metadata structure, etc. Please also give details of current GIS software/platform being used.	The current GIS software/platform is PostGIS working on PostgreSQL database
59		General	We understand a central GIS Repository will be created as a part of proposed solution and data for current 4 databases to be incorporated into the centralized GIS repository, however for remaining 25 databased data collection process to be established and there will be provision to capture the data within centralized GIS repository. Considering the amount of work to be done for all 25 databases, does customer intend to complete the data collection of all 25 databases within the implementation period of 24 months or customer is looking for a solution that will enable data capture post go-live as well?	It is bidder responsible to do GIS data Capture and uploading with field Survey of the Assets shared under the quantitative data provided. It is bidder responsibility to complete data capture. Data Capture post live in Phase 1 is expect but Field Work/Data Capturing and Uploading must be completed within project duration
60		General	Please confirm if Business will be available if we intend to start Part 2 during Part 1 itself for design discussions/workshops	YES, Business team will be availed if bidder propose that way. The Bidder may propose variations to this high-level plan provided in the Implementation Schedule with technical justification <u>without exceeding the total project duration of 30 months</u> . TANESCO will accept variations to the implementation schedule at its discretion, based on justification provided. Reference Section III, Evaluation and Qualification criteria, item 3. Economic Evaluation (a) Time Schedule. Page 54, Last sentence reads "No credit will be given for earlier completion"
61		General	For field application, does Tanesco has a preference on iOS or Android platform based on their roadmap	The bidder can provide the sizing information based on the solution proposed. TANESCO does not have preference for either of these operating systems for field applications
62		General	While Tanesco has mentioned that they will want to run these application to be run in iOS or Android devices, the procurement of mobility devices is not part of the scope and is not seen in the hardware requirements. Is the assumption correct that Tanesco will procure these devices based on the solution provided by the successful bidder	YES. The bidder may provide the sizing information/ specification/Sizing of the Mobility devices which will work better with the envisaged Mobility solution
63	308	Technical Specification (T-TS-46) and 3.4 Supply and Installation Cost Sub-Tables	In T-TS-46 It is expected to provide the annual subscription fee /charges for online access to base maps with high resolution at least 50cm for Urban and 1.5m for rural areas for 4 years since commissioning of the project. But under Section 3.4 there is cost table provided has ONLY the High resolution images for Urban area and NOT for the 1.5m resolution images for rural areas	A separate Item has been added in addendum number 3 to Price Schedule Table 3.2 and table 3.4 and System Inventory Table for Subscription Fees- Online access to base maps & imagery with high resolution at least 50cm for Urban and 1.5m for rural areas for 4 years for Tanzania Mainland – in phase 1, this is different from the Satellite Imagery for Urban Areas, bidders are expected to quote them separately.
64	340 and 341	SYSTEM INVENTORY TABLE (SUPPLY AND INSTALLATION COST ITEMS)	The GIS data Capture and uploading for "All Sites" cost are requested as part of Phase 1 and also in Phase 2. Can you please clarify if the understanding is correct that Tanesco wants the bidder to split the data capture and uploading into two phase based on what can be completed for each phase and deployed?	It is expected the data capture will be start to be done from Phase 1 and expected to be completed before end of Phase 2. Separation of GIS Data Capture and Uploading in the System inventory was a typo error. GIS Data Capture and Uploading is expected to start in Phase 1 and to be completed in Phase 2, Note: GIS system is required to reach and start to be used in Phase 1.
65		Application Maintenance & Support	Please confirm what is the expected release frequency during the warranty support?	Is the bidder referring to release of patches? Please clarify
66	T-SR-2 (page 322)	Application Maintenance & Support	Please confirm if 100% offshore support model is acceptable with you or there should be some presence at onsite also?	100% offshore support model is not acceptable. Please refer to T-SR-4 and T-SR-5 whereby it's explicit stated that "The bidder shall provide on-site warranty support for hardware" and "The bidder shall provide on-site warranty support for software" respectively.
67	Page 101 (12.5)/102 (12.6)	Call center licenses	For Call center licenses and installation professional fees, can you please help with the volumetric for sizing the Inbound Calls center :- <ul style="list-style-type: none"> • No of Agents • Number of Calls per day • AHT (Average Handle Time) • Voice recording is needed or not • Any digital Channel to be considered • Any integration to back end system. Do we need to consider any Outbound dialer in the solution.	<ul style="list-style-type: none"> • No of Agents - 50 agents per shift • Number of Calls per day: - Approximate 8220 • AHT (Average Handle Time):- 2 minutes • Voice recording is needed or not:- YES, it is needed • Any digital Channel to be considered:- Refer CS-144 available in Amendment no. 3 • Any integration to back end system:- Contact center system integration requirements are stipulated in requirements provided • Do we need to consider any Outbound dialer in the solution:- YES

68	Item No. 8, Pre-Bid meeting and Clarification no.1	As per the prebid clarification document ("PRE-BID MEETING MINUTES & CLARIFICATION NO 1.pdf"), Tanesco will provide space (including power and cooling),	Kindly confirm if we should consider in data center cabling for interconnectivity of device, backbone cabling, LIU consideration, cable dressing, tagging, structured cabling, patch panel, rack to rack cabling etc. Kindly clarify the scope for bidder and Tanesco ownership for the same. Do we need to provide the cables as part of this as we don't have any price element in the pricing forms ?or Tanesco will provide the same based on our considerations. Please confirm any User connectivity with respect to cabling is required? we assume that it is confined to only DC cabling.	Bidder shall be fully responsible for interconnection of the supplied new servers, storages and accessories including LIU Consideration, cable dressing, tagging, rack to rack cabling for new racks etc, to ensure the proposed solution realization.
69	Clarification response No. 2	Item number 33, Under "Response from TANESCO"	TANESCO has responded by writing "The bidder shall provide the templates for data preparations in the desired format". Please clarify whether TANESCO staff will carry out field data collection using these templates ? If TANESCO is not carrying out field data collection, please give details of data preparation that will be handled by TANESCO?	The bidder will be responsible for the data transfer/ upload (transfer of legacy data into the new system) and will be required to provide a data migration plan, along with the data templates required to achieve this. TANESCO will be responsible for extracting and cleaning of its legacy data and structuring it according to the templates provided by the Bidder.
70	Pg. 308 (T-TS-44/ T-TS-45 / T-TS-46)	GIS	PRICE SCHEDULE FORMS -- Can you please let us know under which line item in "Recurrent Cost Sub-Tables(s)" need to be used by the bidder to provide the cost on "provision for accessing online base maps such as google (50-150cm accuracy) for 4 years"	Cost item for Online Access to base maps & imagery provisioned under addendum no. 5 of the BDs
71	Section 11.2		TANESCO has confirmed that there is no prescribed format of the Letter of Intent to execute a JV agreement and bidders can create its own format [Reference Q3 to CLARIFICATION RESPONSE No 3.pdf]. In that case, we plan prepare a format that will include A) Names and addresses of JV partners B) Respective scope/work share of each JV partner C) Few lines on the experience of both the parties wherein we have delivered similar engagement. Please confirm if this information will be sufficient and will be acceptable to TANESCO	Bidders shall incorporate all necessary information regarding Joint Venture. Please refer ITB 4.1 and GCC 3.9 of as-issued BDs.
72	Clarification no. 3,Item no.4,	NA	TANESCO has confirmed that Commercial Registration in Tanzania is not mandatory for contract signing. However, commercial registration shall become mandatory when the contractor / supplier needs to transact with public entities / authorities on the issues such as taxes and other government dues. We have a scenario wherein one of JV partners do not have commercial registration in Tanzania, however other JV partner has commercially registered entity. In such case, our understanding is that there is no need to create any separate legal entity/commercial registration in or outside Tanzania during contract signing and in future. The JV partner who has local registration in Tanzania will transact with public entities / authorities on the issues such as taxes and other government dues. Please confirm if our understanding is correct.	Please refer ITB 4.1 - The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Contract will be signed between TANESCO and the JV as an entity, the JV will give a joint Power of Attorney to a person who will sign the contract on behalf of the JV. After signing the contract, the JV must be registered in local authorities to fulfill commercial and legal requirement. All transactions under this contract shall be executed in the name of the JV and not individual members who forming the JV regardless of the commercial registration status of member(s). In case of expediting and executing transactions with public entities the local registered partner may be nominated to execute the transactions but this shall be prescribed in the JV agreement.
73	Page 19	ITB 18.2	Will payments be transferred in USD currency directly to the supplier bank accounts outside of Tanzania say, India or UAE. Please confirm.	YES. Please refer ITB 18.2 of the as-issued BDs. But, if payment is made in USD, bidder(s) shall make sure that they have a corresponsence Bank Account to enable transfer of payments to their bank account in their respective local countries.
74	Clarification no. 3,Item no.9,	General	Under JV agreement a bank account Request you to provide following clarifications in this regard; a. Does TANESCO expects partners to create a separate Joint Venture (JV) entity with commercial registration after signing contract? For example, Say Partner A and Partner B who has signed LOI for creating JV ... create "C", as separate registered entity with some capital investment/stake (like 49%-51%, 50%-50% etc.)...please confirm b. Will TANESCO sign contract with newly created entity (C in above example)...Please confirm c. Does TANESCO expect a bank account attached for this newly created entity (C in above example) to which all payments shall be made. d. If above understanding is correct then please confirm if such entity can be created outside of Tanzania. Say in UAE or in South Africa?	a. YES this has already been explained in previous responses. b. YES. TANESCO will sign contract with the JV (entity C), the person signing the contract shall have joint Power of Attorney from all members of the JV. c. YES d. YES, the JV can be created outside of Tanzania but shall fulfill all requirements prescribed in this tender and shall be registered in Tanzania after signing the contract.
75	NA	General	Will TANESCO accept a model wherein; a. 2 partners do not create any separate entity (upon contract signing or in future), b. Sign JV agreement, get the agreement notarized in India, UAE or South Africa. c. Once contract awarded, Sign tri party agreement with TANESCO wherein both the partners will confirm that both parties agree to be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. d. Nominate a prime partner and provide bank account of the prime partner. e. TANESCO will transfer payments into the bank account of nominated prime partner.	a. NO described in item (d) above b. YES as c. TANESCO will sign contract with the JV. The Joint Venture agreement between parties shall be duly signed and attached with bid before submission of the bid d. The JV can nominate the prime partner but the bank account shall be the JV bank account with the name of JV as it appears in the Contract e. TANESCO will transfer payments into the bank account of the JV
76	NA	General	Will TANESCO accept consortium based model wherein; a. All 3 parties (2 partners and TANESCO) sign a tri party contract/agreement b. TANESCO will make separate payments to each member of the consortium upon written agreement between the members. c. The consortium will raise one universal invoice corresponding to the invoices for each consortium members whose total amount will be equal to the amount of the universal invoice.	Please refer to ITB 4.1. In case of more than one partner, only Joint Venture is allowed in this tender as per the ITB 4.1 & reference to 2.6 Subcontractors/vendors/manufacturers
77	NA	General	If 2 partners come together wherein Partner A acts as prime and other Partner B plays a role of subcontractor...and EACH of the partner have experience of successful completion of one contract with value of USD 24 Million in last ten (10) years, in minimum of 3 functional areas of as per TANESCO's scope...in such case, because it's a Prime-Sub contractor model and not JV will Prime contractor get qualified? Please confirm	Refer to the requirement prescribed in Section III - Evaluation and Qualification Criteria item 2.4.2.

78	NA	General	- What is the average number of vendors that TANESCO transacts with annually. This estimate will facilitate hardware sizing	This is not clear. Vendors in what context? Hardware sizing shall be determined by proposed performance requirements
79	Training programs including Training Certification OEM Academy (Phase 1) – RMS including GIS and ESB	Please confirm number of core/key users as Training by "Train the Trainer" model. What will be the medium of training Class room or online?	TANESCO proposed 50 as per component 6.2, page 336 in the bidding document, bidder can propose the best mix for various functional modules certifications number inclusive of Developers and technical Training. The training is Classroom training at the OEM Academy venue bidder must cover all required costs, tuition fees, certification exams, perdiems, flights to the OEM Academy venue. <u>Please provide us with your per diem rates for travel to India and South Africa to enable us determine an appropriate pricing for the OEM Academy.</u>	This 50 participants as per component 6.2, page 336 is for Phase 1 -RMS including GIS &ESB and 30 participants for Phase 2-TSMS &CoMS. Hence total Training Certification OEM Academy at OEM Academy centre (Software) is 80; Also Aslo We have the Hardware OEM Training for 10 participants. Hence for both software and Hardware OEM Trainings Per diems rates as follows :consider for per diem allowances rate for Item 6.1 (9 participants at the rate of USD 438,1 participant at the rate of USD 504), for total Items (6.2, 6.4,16.2,16.4, 72 participants at rate of USD 438, 8 participants at rate of USD 504)
80	Page 61	Section III.Evaluation and Qualification criteria ,2.4.2 Specific experience	I would like to seek a clarification on Page 61 of the tender document. Kindly confirm if the references provided by a sub-contractor would be considered to meet tender's administrative requirements on item 2.4.2 specific experience. The question is if for a certain bidder or bidding consortium the references belong to the a sub-contractor and that they match this criteria will this be deemed to have meet the requirement or is it mandatory that the reference sites belong to the one of JV Members.	In reference to ITB 4.1, Consortium is not allowed. Only Joint Venture is allowed. The experience is considered from the members of the Joint Venture only and not Subcontractors. Refer to the response under clarification No. 77 above & reference to 2.6 Subcontractors/vendors/manufacturers
81	DGT-11	Asset management: Ability of the system to track asset borrowing process with appropriate approval levels and prompt for alert when borrowing time lapse	Borrowing - internal to Tanesco or external?	Internal
82	DGT-14	Ability for the system to generate demand forecasts for customer service lines project based on analysis of aggregated data	Distribution and service line maintenance.Please clarify	The system should be able to conduct demand forecast for new customer requests (for new power lines/meters/ etc) based on historical data and other criteria
83	DGT-15	The system should provide for intelligent governance and risk compliance (GRC). Please explain in detail.	Distribution and service line maintenance. Please clarify	The system should have a Governance, Risk and Compliance (GRC) ERP functionality to meet risk management requirements for TANESCO
84	DGT-26	Ability of System to provide Transmission network construction and maintenance tracking, including but not limited to: • Customer Requests • Transmission Network Planning • Network Financial and Economic analysis • Various Approval Levels • Financial Costs and Projections • Materials usage/ Bills of Materials • Load flow analysis • Resources • Ability to attach technical documentation such as CAD Diagrams, plans, diagrams, specifications etc.	Distribution and service line maintenance. Where are these used and how?	These respective functional requirements outlined here may be part of various modules. I.E. The system should be able to facilitate deployment/ construction and maintance planning and tracking of TANESCO assets across generation, transmission and distribution. The system should also be able to facilitate and track new customer requests for service (e.g. new service connections (lines/ meters)). The system should be able to conduct financial analysis, including cost, revenue and profitability, historically and forward looking forecasts, for operations across generation, transmission and distribution. The system should incorporate workflow approval functionality for key activities and requests across modules. The system should also allow users to attach documents for operations and maintenance planning activities where relevant (e.g. diagrams and specifications)
85	DGT-27	Ability of System to provide generation network construction and maintenance tracking, including but not limited to: • Customer Requests and Applications • Generation Planning • Network Financial and Economic analysis • Various Approval Levels • Financial Costs and Projections • Materials usage/ Bills of Materials • Load flow analysis • Resources • Ability to attach technical documentation such as CAD Diagrams, plans, diagrams, specifications etc.	Distribution and service line maintenance. Where are these used and how?	These respective functional requirements outlined here may be part of various modules. I.E. The system should be able to facilitate deployment/ construction and maintance planning and tracking of TANESCO assets across generation, transmission and distribution. The system should also be able to facilitate and track new customer requests for service (e.g. new service connections (lines/ meters)). The system should be able to conduct financial analysis, including cost, revenue and profitability, historically and forward looking forecasts, for operations across generation, transmission and distribution. The system should incorporate workflow approval functionality for key activities and requests across modules. The system should also allow users to attach documents for operations and maintenance planning activities where relevant (e.g. diagrams and specifications)
86	DGT-28	Ability of System to provide Distribution network construction and maintenance tracking, including but not limited to: • Customer Requests and Applications • Distribution Network Planning • Network Financial and Economic analysis • Various Approval Levels • Financial Costs and Projections • Materials usage/ Bills of Materials • Load flow analysis • Resources • Ability to attach technical documentation such as CAD Diagrams, plans, diagrams, specifications etc.	Distribution and service line maintenance. Where are these used and how?	These respective functional requirements outlined here may be part of various modules. I.E. The system should be able to facilitate deployment/ construction and maintance planning and tracking of TANESCO assets across generation, transmission and distribution. The system should also be able to facilitate and track new customer requests for service (e.g. new service connections (lines/ meters)). The system should be able to conduct financial analysis, including cost, revenue and profitability, historically and forward looking forecasts, for operations across generation, transmission and distribution. The system should incorporate workflow approval functionality for key activities and requests across modules. The system should also allow users to attach documents for operations and maintenance planning activities where relevant (e.g. diagrams and specifications)
87	DGT-29	Ability to issue completion certificates (for completion reporting to finance) and notifications to customers through SMS, emails or social media.	Distribution and service line maintenance. Please clarify	The system should be able to generate work order completion certificates once an activity has been complete (e.g. roll out of new meter and/or new lines for new customer). The system should also be able to send notifications to customers at different stages of the work order (e.g. to notify work has been complete)
88	DGT-30	Ability of the system to control through workflow management issuance of work completion certificate only after inspection e.g. Service connections, Maintenance, Construction, etc.	Distribution and service line maintenance.Please clarify	The system should have the ability to incorporate work flow functionality into the work order process. E.g. for a new service connection for a new customer, the system should facilitate different stages of the process, some of which will require approvals from specific types of roles. In this case for example, the completion certificate would only be issued after an inspection has been conducted on the site of the new service connection. <u>inspection details must be in Compliance to provided requirements for specific task</u>

89	DGT-36	Ability for system to provide incident tracking for distribution assets, such as customer notifications ,proposed actions, status, scheduled time, occurrence trends etc.	Distribution and service line maintenance. Please clarify	The system should be able to facilitate customer issue tracking, including description on issues, status, etc. This should be integrated with the work order functionality in addressing raised issues, including scheduling of appointments for TANESCO staff related to addressing of issues. The system should also be able to conduct analytics on the issue log to identify trends
90	DGT-43	Ability of the system to asses load management parameters	Distribution and service line maintenance. What load management parameters are available and from what systems?	The bidder is expected to provide the proposed solution that needs to provide the required functionality. The detailed parameters can be agreed during blue print design phase.
91	DGT-82	Ability of the system to capture and analyses system loading and upgrades	Transmission line/substation construction and maintenance	The bidder is expected to provide the proposed solution that needs to provide the required functionality. This is in line with other requirements to ensure transmission line/substation construction and maintenance are done with adequate data on ground for the load requirements etc. The detailed can be agreed during blue print design phase.
92	DGT-86	Ability to set limit to rescheduling of maintenance activities and escalate the requirement to higher levels	Transmission line/substation construction and maintenance. Please define what limits needs to trigger escalation	The system should have the ability to set a maximum number of allowable rescheduling of maintenance activities. If a maintenance staff would like to reschedule maintenance activities further than the maximum allowable times, the system will require approval from a designated role (e.g. Supervisor or Manager). The specific limit will be decided during design phase
93	DGT-96	Ability to capture line tripping	Transmission line/substation construction and maintenance. Line tripping is normally triggered from SCADA/EMS applications.	The proposed solution should have ability to capture line tripping from the respective source, This is one requirement inline with SCADA integration. Hence the maintenance system is expected to get the line tripping and report accordingly.
94	Page 42	ITB 23.1	We seek your kind support in put request to postpone the submission of technical offer for 3 weeks for the following reasons: 1. We are still receiving the offers to submit the best solution. The extended time will give us full chance to provide complete integrated solution with highest quality needed for one of the Mega projects in your esteemed Country.	Extension granted to 11th January, 2021. Please refer to Amendment # 5.
95	CS-1	Ability to generate trend analysis reports in real time for various customer service reports including but not limited to: •Monthly operational reports •Number of customers (By Tariff category, region/branch etc.) •New connections (By Tariff category, region/branch) •Customer status (Live, Dormant, suspended, disconnected, reconnected) •Customer service charter •Service delivery performance report •Common reported problem report •Technical Breakdown (TB) status report •TB response time efficiency report •TB Revenue losses report •Outage report •Frequency reported problem/case per customer •Complaints Report •Customer Requests reports •Customer Inquiries reports •Monthly sales/revenue reports (by branch(region/zone/district), by tariff)	Is any of the existing system will be used in the TAZA project which TANESCO has already purchased? Let us know if any existing software product is going to be used to handle and track technical break down? Need reports which are required we need samples of the same. Need the interaction points with the ERP system.	Bidder is expected to provide the proposed solution as per requirement. No System has been purchased already for this functionality. Systems expected to be decommissioned include ISCALA (finance, payroll, material management), Hiaffinity (post-paid billing), Service Delivery Management (in-house developed CRM), Procurement System (in-house developed), GIS (4 region database), HR system (in-house developed) and other minor peripheral systems. See Background Section of bid document for complete list Sample reports will be provided during design phase, after contracting. Report requirements have been provided in bid document.
96	CS-2	Ability to generate in real time energy consumption reports (energy demanded vs energy consumption) based on different parameters such as but not limited to: •Geospatial data •Demographic Data	Which system will have the Geospatial data and Demographic Data? How these GIS and Demographic reports will look like. Do we have a sample for the same? Need the GIS system data model, API contracts and APIs	GIS System and Billing system will have the data depending on design that will be implemented. Enterprise GIS is part of the solution to implemented by the bidder as per requirement and information provided. Other necessary information will be provided and agreed during design stage of the solution.
97	CS-3	Ability to analyze customer data from customer engagement channels (including social media) and generate reports in real time	What are the analysis points to be generated in real time? Need more details on this requirement.	This can include, but is not limited to, customer queries, customer query type, customer complaints, customer complaint type, customer requests, customer request type, etc.
98	CS-5	Ability to enable a customer to inquire billing info online or via cell phone e.g. balance statements	Is there any existing 'self service portal' ?	No, there no existing 'self service portal inquire billing info online or via cell phone e.g. balance statements. The new system should include this customer portal as per the requirement.
99	CS-9	Ability for a customer to view power outage status online (via Integrated Outage Management System), This should be accessible via mobile devices	Please provide more details about Outage Management system used here? Is TANESCO having any Outage management system? Which Outage Management system is used here and who is implementing this? How many integrations touchpoints are there from the Outage Management system? Is mobile App is also in scope or the end user will use web browser to see outage information.	TANESCO currently does not have an outage management system. However the system should have the ability to integrate with an outage management system, as this is expected in the future.
100	CS-20	Ability to integrate with external applications such as bank payment applications, Mobile money, electronic accounts, EFT, TISS, debit card, Credit card etc.	How many integration. Please List all integration?	All integration requirements have been provided in the requirements document and clarifications provided. The proposed system is expected to be capable of integrating with unlimited number of connection channels as per CS-20 page 269 Detailed integration specification will be provided during design phase
101	CS-22	Ability of a system to integrate with Government Electronic Payment Gateway (GePG) for bill control number generation, payment information	Please list all integrations for this requirements?	All integration requirements have been provided in the requirements document and clarifications provided. Detailed interface specification (API) will be provided during design phase, after contracting. As per CS-22, page 269 GePG is the gateway for generating Bills control numbers and processing of all government Revenue Collections.
102	CS-42	Manage securities for the purposes of credit vetting and risk hedging.	Is this Security Deposit?	Yes, it is security deposit by the customer. The bidder is expected to provide the solution as per requirement to enable TANESCO manage the securities.
103	CS-44	Ability to determine contribution of specific customers based on their consumption and payments	What is contribution of customer means?	Ability to report and analyse on specific customer power consumption as well as payment analysis

104	CS-46	Ability to provide automated credit and debt management functionality including bad-debt write-offs, debtors aging, interest calculations, debtor days reporting, disconnection notice, payment arrangements.	What is payment Arrangements?	Post paid customers may setup payment arrangements with TANESCO to pay off debt both in whole or in installments - The system should be able to facilitate this process.
105	CS-52	The system should be able to forecast scale number of customers based on different parameters projections	What is the Parameters Projections?	This can be based on, but not limited to, population growth estimates, urbanization estimates, micro-economic indicators, the historic rate of new connections.
106	CS-53	Ability to integrate CRM functionality with billing system to allow new customers to automatically be added to billing system	What customer relationship management system we are talking about using here?	This question is not clear. The system should have CRM functionality.
107	CS-57	Ability to integrate CRM with Outage Management System (OMS) to allow for customer service agents and customer to have access to information on distribution outages	Need more clarify on the types of distribution Outages?	TANESCO currently does not have an outage management system. However the system should have the ability to integrate with an outage management system, as this is expected in the future. The types of distribution Outages are planned and unplanned Outages
108	CS-58	Ability to capture and track client satisfaction and client satisfaction trend over time	What is the current process to capture customer satisfaction?	The current process to capture customer satisfaction is customer satisfaction Telephone Survey.
109	CS-60	Facility to provide alert for frequent complaints/queries per substation, feeder, transformer, area or specific customer	Need more explanation on the purpose of this Requirement.	The system should have the ability to conduct trend analysis on root cause of customer issues. I.e. Once an investigation has been complete, and cause of the customer query has been determined, this should be captured in the system. TANESCO should therefore be able to conduct trend analysis to determine whether there are any particular areas or assets that are causing frequent issues.
110	CS-61	Ability to send information to customers through communication application based on related criteria such as substation, feeder, transformer, area, tariff	Need more explanation on the purpose of this Requirement	The system should have the ability to send email and SMS broadcasts to customers and customer groups. Customer groupings may be by substation which the customers are linked to, transformer which the customers are linked to, feeder which customers are linked to, area which customers reside, tariff which the customers are on, etc.
111	CS-63	Ability to process through workflow power application process through appropriate approval levels	What is workflow power application process ?	This is referring to new customer/ new line request. The system should provide automated workflow to ensure the appropriate roles review and approve the process, up to the field team receiving the green light to install the new meter/ line.
112	CS-64	Ability to integrate with call center system	Assume that Call Centre system is different. Refer RFP NUMBER OF USERS. Please provide more details about call centre system and integration points ? Need the different function of Call center Customer Service, Outages etc	Contact Centre requirements have been provided through an amendment/ clarification. See TANESCO website
113	CS-68	Ability to produce quotations based on site surveys for new and existing customers	Need More clarification on this requirements	The system should have the ability to generate and capture quotations for potential new and existing customers.
114	CS-67	Ability to upload customer complaints from social media and TANESCO website	What all social medial platforms we are talking about here. How many channels for Social Media are there from where complaints can be raised?	This should include, Facebook, Twitter, Instagram, and LinkedIn. TANESCO may expand to include Whatsapp in the future.
115	CS-71	Ability to integrate with other external applications including call center applications, Geographic Information System, Automatic Meter Reading system (AMR)	Please provide integration points for each external applications. Also, please let us know if the communication is two way or one way ?	Detailed interface specifications will be provided in design phase. Note: Call centre has been replace with Contact Centre across the ammended bidding document.
116	CS-72	Ability to generate service line application progress report	Which system is service line information is stored ? Please provide more details on existing process and application involved ?	The system will be expected to facilitate the new customer/ new line request process. As part of this, the system should be able to provide report on the progress of new customer request.
117	CS-73	Ability for customers to access their account including current control number for payments through mobile devices and online	What is meant by current control Number? Need more clarification on this requirement.	Control numbers are generated at Government electronic Payment Gateway(GePG) where TANESCO billing system submit bills to GePG for control numbers issuance and control numbers are received from TANESCO to be shared to our customers. control numbers created at GePG expires on monthly basis. Through the self service portal, customers should be able to track their payments using the "control number" provided at the time of bill payment.
118	CS-82	Maintain information on POM (point of metering) as described below: Maintain and validate customer POM; and Link reference POM to meter reference number and type of meter, tariff, and Geo location (e.g. region, district, GPS coordinates, etc.).	Which system will provide Point of delivery, measurement and meters details? Please provide the details of which system is used to store POM information ? Also, please let us know the integration points with C2M ?	Billing system. TANESCO will provide more detailed during the design phase.
119	CS-83	Maintain meter details as described below: • Link and maintain meters to PODs; Removal, replacement and disconnection of meters in the system; Meter replacement details on PODs; New meters or reinstated meters at existing PODs; Validation of meter details; and Characteristics of individual meters	Please provide details of integration points for each external system.	All integration requirements have been provided in the requirements document and clarifications provided. Detailed interface specification will be provided during design phase, after contracting.
120	CS-85	Allow for singular and batch upload and download of meter readings from the following: Hand Held Units; Data acquisition of summated hourly/half-hourly readings (raw data) per point of delivery for large power users; Standard flat files; and Standard PC files.	Need Integration with Headend systems? Which Headend system to be integrated?	TANESCO does not have the hand held system. The bidder has to provide the solution as per proposed requirements.
121	CS-87	Ability to Calculate Energy Transactions (demand and consumption) based on actual readings.	How to calculate Demand? Is it from some system?	Energy Consumption (KWH) = Current Actual Reading minus Previous actual Reading. Demand Consumption (KVA) = Monthly Actual reading

122	CS-88	Facility to estimate Highest maximum demand (kVA). HMD rule.	Need more details	HMD Rule: if current KVA reading is less than previous month, then KVA = 75% of the highest KVA reading for the previous three months
123	CS-89	Ability to summarize half-hourly readings into monthly totals using complex tariffs e.g. time of use or other special deals.	Please provide the detail of the system which will be used to send half hourly data to C2M.	Automatic Meter Infrastructure(AMI)
124	CS-96	Include facilities for receipting via 3rd Parties (e.g. Cash/Cheques via Banks, Direct Debits) identify validation, reconciliation and reporting processes used	Need list of All integration that need to be done for this requirement.	The bidder is expected to provide the proposed solution for this functionality as per requirements. More details can be provided design stage.
125	T-TS-31 T-TS-32 T-TS-33 T-TS-34 T-TS-35	Bidder shall provide minimum Storage system capacity for the system usage with capability for future growth on storage system based on full flash Technology....	Could you please confirm if a consolidated (Engineered or Hyper Converged system) is acceptable as one in the main site and the other in the DR site or we must separate each environment (Prod. - DR -Dev.-Test-Training) physically.	consolidated (Engineered or Hyper Converged system NOT Acceptable, Bidder are required to comply with requirements provided for separate physical environments provided, TEST (UAT) should be replica of PROD environments. Both PROD and DR must meet high availability requirements. Training and DEV environments need not be replicas. Note: this as well nullify Clarification no.2 item 112 was a typo error , it was meant to mean Engineered system NOT preferred. Refer to the requirement Appliance based architecture is NOT preferred.
126	NA	General/Filed data capture	The surveying (field data capture) for the entire 120K Km would require more than 200 Fulltime resources during the 6months period, assuming we do this from scratch in the field. Apart from the 8K Km already mapped, don't you have information from other surveys that we can use to reduce this scope and complexity? Can we consider a subset of the entire 120K Km?	The bidder is expected to achieve the proposed assignment as required. Field survey is required for the entire assets not a subset.
127	clarification number 4, item 49	Migration of existing 4 GIS database into centralise System	Considering your clarification number 4, item 49, can we consider the information in the 4 standalone GIS databases and not include the local survey in those 4 regions?	YES
128		Ref Clarification no. 2 item 100	Is defined timeline period of 24 months from completion of pre-commissioning a mandatory? We believe, the defined timeline is aggressive. So, can we propose longer timelines, say 30 months ? If yes, how will it impact evaluation score?	Bidder is required to comply shall with the specified time duration of the information system completion period ,which is mandatory. This nullify the previous;y issued Clarification no. 2 item 100
129		Ref Clarification no. 4, item no. 105	Data Centre Monitoring Tools	Refer to previous clarification no. 4, item no. 105. And Note that the vendor is required to provide only DC Monitoring sizing Specifications which are compatible to the proposed solution, TANESCO shall source the DC Monitoring tools. This nullify the previous;y issued Clarification no. 4 item 105
130	NA	Please specify the following regarding the call center	How many locations?	One Location for all agents
131	NA	Please specify the following regarding the call center	How many concurrent agents are needed?	50 (fifty) concurrent agents are needed ,per shift (Total 200 agents); three shift, while the fourth is off
132	NA	Please specify the following regarding the call center	If more than one location, How many agents per each location	Not applicable
133	NA	Please specify the following regarding the call center	How many analog external lines?	10
134	NA	Please specify the following regarding the call center	How many E1 lines?	Not applicable
135	NA	Please specify the following regarding the call center	How many external SIP trunks? And how many channels?	SIP Trunks 100, 1500 channels
136	NA	Please specify the following regarding the call center	How many basic IP Phones?	Bidder to provide the optimum Sizing specifications compatible to the proposed solution for performing the required functionality. To be sourced under separate tender
137	NA	Please specify the following regarding the call center	How many High-end IP Phones?	Bidder to provide the optimum Sizing specifications compatible to the proposed solution for performing the required functionality. To be sourced under separate tender
138	NA	Please specify the following regarding the call center	Is high Availability required? (i.e. 2 PBX servers within the DC)	YES High Availability (HA) is required
139	NA	Please specify the following regarding the call center	Is there a DR site needs a failover server? (other than the HA server in the Main DC if exists)	YES, as per DC and DR specification provided for the proposed solution.
140	NA	Please specify the following regarding the call center	What is the survivability mode needed in remote locations? (i.e. how long remote locations can survive if the connection to the Main server is down)	All calls shall continue and operate at full operation (100%); when service or main server is down
141	NA	Please specify the following regarding the call center	What is the expected future growth? (i.e. how many users planned to expand in the future, this number will not be licensed.)	Current requirement is 50 agents concurrent, it is expected future growth concurrent agents 200 agents in 4 shifts
142	NA	Please specify the following regarding the call center	Is call Recording needed? if yes, For how many agents/ports? (total agents for storage calculation and ports for concurrent agents recorded)	YES call recording is required, Total Agents : 200, Concurrent : 50
143	NA	Please specify the following regarding the call center	Is reporting needed? if yes, For how many users/ports? (total agents for storage calculation and ports for concurrent agents recorded)	Total Agents : 200, Concurrent : 50
144	NA	Please specify the following regarding the call center	o Do you need IVR? And how many ports?	YES IVR is required ,ports : 200
145	NA	Please specify the following regarding the IPT	o How many locations?	One Location for all agents
146	NA	Please specify the following regarding the IPT	o How many total IPT users?	50
147	NA	Please specify the following regarding the IPT	o How many users per each location?	50
148	NA	Please specify the following regarding the IPT	o How many analog external lines?	10
149	NA	Please specify the following regarding the IPT	o How many E1 lines?	Not applicable
150	NA	Please specify the following regarding the IPT	o How many external SIP trunks? And how many channels?	100 SIP trunks, 1500 channels
151	NA	Please specify the following regarding the IPT	o How many basic IP Phones?	Bidder to provide the optimum Sizing specifications compatible to the proposed solution for performing the required functionality. To be sourced under separate tender
152	NA	Please specify the following regarding the IPT	o How many High-end IP Phones?	Bidder to provide the optimum Sizing specifications compatible to the proposed solution for performing the required functionality. To be sourced under separate tender
153	NA	Please specify the following regarding the IPT	o How many analog phones?	10
154	NA	Please specify the following regarding the IPT	o Is high Availability required? (i.e. 2 PBX servers within the DC)	YES High Availability (HA) is required
155	NA	Please specify the following regarding the IPT	o Is there a DR site needs a failover server? (other than the HA server in the Main DC if exists)	YES
156	NA	Please specify the following regarding the IPT	o What is the survivability mode needed in remote locations? (i.e. how long remote locations can survive if the connection to the Main server is down)	All calls shall continue and operate at full operation (100%); when service or main server is down
157	NA	Please specify the following regarding the IPT	o What is the expected future growth? (i.e. how many users planned to expand in the future, this number will not be licensed.)	Current requirement is 50 agents concurrent, it is expected future growth concurrent agents 200 agents in 4 shifts
158	Pg 356	SYSTEM INVENTORY TABLE (RECURRENT COST ITEMS	Q1. This is on Page 359 amendment 3 revised 06 Oct 2020-2 what is the definition of Year1. Reference to SYSTEM INVENTORY TABLE (RECURRENT COST ITEMS) . Is this the project Phase 1 to be completed in Year 1. Kindly confirm.	Reference to SYSTEM INVENTORY TABLE (RECURRENT COST ITEMS) page 356 (In Ammended Bidding document). This is the re-current Cost Items table for the 3 components items 1, 2 and 3 mainly for Software & Hardware Maintenance and Upgrade, Defect Repair. Phase 1 implementation is expected to be completed within year 1, and GIS Data Capture to proceed in Phase 2, refer at A. Implementation schedule page 338.
159	Page 484	(GCC Clause 12)	Q2. Terms of Payment (GCC Clause 12) Page 484 There are no impacts to payment schedule for the additional items added to the SOW. Kindly review	Additional Items Requirements added are for the contact centre (CS-106 to CS-173) for the clarity of the Contact centre requirements are per bidders request. Price Item for Contact Centre exists from the original bidding document, referred as Call Centre Component No. 14.5 & 14.6 page 101

160	NA	GIS Data Capture and uploading.	Q3. can Tanesco provide a more detailed description of GIS Data Capture and uploading, and its desired outcomes?	More details of GIS data Capture and Uploading is found at 3.1 Geographic Information System, GIS Scope of Work Page 323, Background section page starting 379 to 396 and Implementation schedule section on page 338
161	Page 351	System Inventory Tables(Supply and Installations costs Teme- Revised)	Regarding the OEM training, we understand that it is requested to consider 80 training delegates. Could you please provide a split of the super user trainees on the following areas: Finance training delegates Procurement training delegates Project management training delegates HR training delegates ERP technical support Hyperion users	The proposed training for super users per areas of expertise appended in the Revised Bidding document as addendum, page 355
162	NA	General	As per communication received from MICROSOFT, it has been brought to our notice that TANESCO has an existing EULA with MICROSOFT. In this case, is the bidder only required to share the count of licenses for any Microsoft related component in their solution, such as Operating System and Database licenses to TANESCO? Please confirm	The number of licences for the proposed solution should include quantity and price accordingly
163	Clarification 1 - Item No. 8	General	Are we to propose the infrastructure of datacentre, server rooms, power to DC/Server rooms & Fibre/VSAT communications for this 100% on-premise solution	TANESCO currently has a production and DR data Centre facility which will provide the space for the hardware to be supplied by the bidder as per bid document. TANESCO will only provide the space, including cooling and power. Server racks must be supplied by the bidder as applicable The bidder is expected to provide sizing specification for power systems, cooling systems and Uninterrupted Power Supply (UPS) for the infrastructure to be supplied by bidder for both Prod DC and DR DC requirement for TANESCO sizing purposes only. TANESCO currently uses Active Directory identity management for user authentication. For Fibre/VSAT Communications required, bidders are to propose sizing accordingly, check more details in the requirements provided.
164	Clarification 1 - Item No. 13	T-SS-5, Data migration	Requesting more info on the effort related to data migration...e.g. what systems will have data to migrate, and what is the size, and from what format	Systems expected to be decommissioned include iSCALA (finance, payroll, material management), Hiaffinity (post-paid billing), Service Delivery Management (in-house developed CRM), Procurement System (in-house developed), GIS (4 region database), HRM system (in-house developed), ePayment, TANGePG, COY FORMS. iScala Size: 800GB, MS-SQL 2014), Hiaffinity (Size 200GB, Progress Database), SDM (Size 600GB, MySQL 8.0.20), Procurement system(TAPROS, Size 1 GB, MySQL 8.0.20), HRM system(Size 23 GB, MySQL 8.0.20), ePayment and TANGePG (Size 140 GB, MySQL 5.7), COY FORMS 5GB, MySQL 8.0.20, GIS (4 region standalone database), Size 300GB, PostGre) NB: Not all data size from these system will be migrated 100% it will depends on migration strategy and nature of system especially the financial and other transactional systems, Stand alone GIS all data are expected to be migrated
165	Clarification 1 - Item No. 19	general	Will we need to plan and execute business process re-engineering to streamline your current process	Bidders are not expected to execute Business process Re-engineering. Blueprinting is part of the scope for the design phase.
166	Clarification 1 - Item No. 24	Survey/Mapping	Has the survey/ mapping already been done for GIS	survey/ mapping have been done only for 4 existing GIS Database data shared in the bidding document as quantitative data for the 4 GIS database for Four Regions namely Ilala, Kinondoni North, Temeke and Pwani, which will be required to be migrated into Enterprise wide GIS to be implemented under this scope. All other quantitative data shared in the bidding document have not been surveyed/mapped, it is part of the scope of GIS data to be captured, surveyed/Maped under this assignment as part of of GIS. GIS information referred here are found in bidding document Section VII, Requirements of the Information System under Qualitative Existing Information for Corporate GIS System for Generation, 25 Distribution, Transmission and Real Estate assets Page 379 to 396)
167	Clarification 1 - Item No. 26	requirements with regards to availability, security, compliance to data privacy, business continuity	Do you have any specific requirements with regards to availability, security, compliance to data privacy, business continuity	Please see requirements stipulated in the bidding document. Availability, found at Technology Specification (T-TS-12 on page 316, T-TS-31 & T-TS-32 on page 318, found at Technology Architecture T-TA-2 on page 326, Service Operation T-SR-12& T-SR-13 on page 333, TSR-38 on page 336), security & compliance to data privacy found at Security specification (T-SS-1 to T-SS-24 on page 323 to 326 , , business continuity found at Technology specification (T-TS-23, page 317 and Service Operation (T-SR-37 page 335)
168	Clarification 2 - Item No. 3	Technology Specification(T-SR-22)	Please let us know if there is any backup Archival policy that we should consider.	There is Backup Policy. Policy documents will be provided once the project commences. RTOs and RPOs for support SLAs have been provided in the bid document. RTOs and RPOs found at Technology Architecture (-T-TA-3 page 327)
169	Clarification 2 - Item No. 7	Sec 3.1	What are the four existing standalone GIS database. What spatial format is the data stored in?	The four existing standalone GIS database are Ilala Temeke, Kinondoni North and Coast regions, refer page 379, Data stored in Vector spatial format (Shape files) which will be required to be migrated into centralized enterprise GIS system
170	Clarification 2 - Item No. 8	Technology Specification(T-TS-23)	Please provide details on existing backup plan, backup policy and retention period in detail. Also let us know the backup tool that is currently in use.	We have backup plan, Backup policy and retention period in place. Our backup plan address the availability requirement of 99.982% as stipulated in T-TS-12 for business continuity Retention period is 10 years. The bidder is expected to provide the backup facility which shall assist TANESCO to achieve the requirement. for both DC and DR
171	Clarification 2 - Item No. 11	Technology Specification(T-TS-9)	Kindly let us know any frontend data change rate per day that bidder may consider. This will help us in designing backup and DR solution.	Based on T-TS-9 requirement , bidder can use the annual percentage provided for pro rate the daily, monthly as indication. The bidder need to refer to T-TS-8 on page 315 as well to get more insight of the proposed solution.
172	Clarification 2 - Item No. 13	Geographic Information systems	The system must provide GIS data analysis and modelling. What kind of analysis and modelling is required?	Spatial data analysis for both 2D, 3D that includes overlays, promity, extract tools, splits tools, statistics etc to support detailed analysis of the networks and components. Modelling - capability for Design of lines with substations, capability for simulation of planned spatial data (substations, station, switches, voltage regulator etc). System must support as built modelling for the existing infrastructure optimization to allow future expansion etc.

173	Clarification 2 - Item No. 24	Document Management	Please confirm what system is used today for document formatting and printing and if it will continue to be used for the same.	TANESCO have, EDMS Open Text Case360 as Document Management System, & it will continue to be used for the same.
174	Clarification 2 - Item No. 25	General	Please confirm how many years of data needs to be migrated in new CMS Solution /Sub - systems like RMS,CoMS and TSMS	This will differ/depend from module to module and type of data. This will be accessed during foot printing. The bidder will be responsible for developing a migration strategy/ plan, as per bid document.
175	Clarification 2 - Item No. 29	General - Call Center requirements	There is a lot of ambiguity in the call centre requirements. Whilst there are no specific requirements around call centre (e.g., Telephony, IVR, Voice, etc.), the call-center (part of the existing SDM application for CRM) is referred as both 1) part of to-be CoMS (definition of CoMS, section 3.4) 2) external system (CS-71, CS-64, GIS-3) in different requirements. Please confirm what is the expectation and requirements around call center setup.	The bidder is expected to provide the proposed solution as per the amended requirements of Contact centre part (CS-106 to CS-173). NB :replaced with blue colour all occurrence of Call centre with Contact centre in the bidding document.
176	Clarification 2 - Item No. 32	General (Integration with other platforms)	Requirement CS-68 mentions the need to upload customer complaints from social media and TANESCO website. Please advise if the scope is limited to uploading complaints only. If not, please clarify the scope of integration with public platforms and social media.	The CRM solution should support integration with social media, website as well as other traditional channels, to allow customers to interact with TANESCO via their preferred channels. The level/scope required includes but not limited to access to customer data, billing information, submission of complaints, temporary breakdown (TBs), Requests, Enquiries .Level of Access to relevant information will be detailed during design phase of the proposed solution.
177	Clarification 2 - Item No. 33	GIS database	- From "Background and Information" section, it is not clear regarding scope of Data capturing (which are apart from those captured in existing 4-Stand-alone GIS database). Please detail out all GIS data capture possibilities at Tanesco. - Also the source format (whether it is paper/hardcopy, CAD, PDF, Image, etc.) of these data to be captured are not clear. - Can Tanesco give a clarity on the quantity of these source inputs/documents needs to be specified and typical sample document of each type to be provided.	Scope of GIS Data Capturing include but not limited to field Surveying, Digitization, data uploading etc into the centralized GIS system for All Assets quantitative information listed in the bidding document from page 379 for Generation, Distribution, Transmission, real Estate assets. The bidder shall provide the templates for data preparations in the desired format. At the moment data are at various formats such paper, .DOCX,XLSX,PDF,CAD,Image etc
178	Clarification 2 - Item No. 34	Sec 3.1	What is the existing GIS system at Tanesco?	The name of existing Standalone GIS System is Open GIS, which is the Open source.
179	Clarification 2 - Item No. 35	GIS	Are all the data shown in the quantitative information for corporate GIS that needs to be migrated to GIS solution available as spatial format and not just tabular data.	Yes, data from page 379 are in our four standalone GIS database are in spatial format needs to be migrated into proposed centralized enterprise wide GIS In spatial format.
180	Clarification 2 - Item No. 51	3. Security Specification T-SS-1	Need more details regarding log size, storage size frequency	The system should have the ability to generate audit trail including the User ID, device, location, date and time accessed for all changes. The bidder is to propose log size, storage size, frequency", etc., as part of their proposed solutions
181	Clarification 2 - Item No. 52	3. Security Specification T-SS-2	Please share the details for the logs which the organisation needs to be covered?	This requirement is referring to failed attempts to make changes,details required includes but not limited to User ID, device,table, location, date and time etc
182	Clarification 2 - Item No. 54	3. Security Specification T-SS-5	1. Provide more details of Encryption? 2. We need to consider Encryption or DAM ? 3. What are the different internal & external user categories within the organization ? What is the total volume of both internal & external users ? (A few examples of internal users are Corporate employees & Contractors while external users are customers & service agents and so on.)	The bidder is to propose their security architecture approach based on requirement provided on as per T-SS-5 encryption is required & applies for all types of users (both internal and external).
183	Clarification 2 - Item No. 59	3. Security Specification T-SS-11	Please elaborate this point. Also share the number of users?	This requirements is referring to session management. Estimated number of users for CMS has been provided in the bid document. Existing number of users (current state for legacy systems) has also been provided on Page. 378
184	Clarification 2 - Item No. 61	3. Security Specification T-SS-17	Please share the details which will be required for the security audits.	Details required includes but not limited to User ID, date , time, source IP, database accessed etc
185	Clarification 2 - Item No. 67	7. Service Specification – Recurrent Cost Items (T-SR-12)	Any network monitoring tool is required? If yes, Please confirm the number of network devices to be monitored and types of alerts required.	Network monitoring tool is NOT required, but The bidder is required to provide minimum specifications sizing for system and network monitoring tools they proposed towards availability of the system. The sizing information includes but not limited to Minimum 10,000 number of network devices and types of alerts required (node status), link bandwidth, throughput, application performance,
186	Clarification 2 - Item No. 67	NA	Such transformation projects can be executed by leveraging "Onsite-Offshore" delivery model wherein some team members can work from TANESCO offices in Tanzania and some of the team members can work remotely from offshore locations in different countries. This becomes a cost effective model wherein TANESCO gets quality solution at lower costs. Will such model be acceptable to TANESCO? If yes, will TANESCO provide remote connectivity at offshore locations for development and test environments?	TANESCO will allow for remote connectivity for virtual project activities. VPN must be employed to maintain data privacy and security. In the event that the bidder will be conducting off-shore implementation activities, quality of delivery, including TANESCO stakeholder engagement, must not be compromised. The bidder must demonstrate this in their implementation approach. TANESCO expects to have on-premise development & test environments to be used for the purpose of the assignment. The Bidder shall be allowed to connect with VPN that will be provided by TANESCO to access these environments.
187	Clarification 2 - Item No. 86	Geographic Information System	"The system must allow easy development and integration into the GIS of an import tool for any specific format required by TANESCO" Could you clarify this point?	The system must allow any development and integration. The system must allow plug-ins, to embedding into GIS system, customizations for additional features
188	Clarification 2 - Item No. 87	Geographic Information System	"The system must have in-built support for consumer map services like Google™ and Bing™ with high resolution imagery below 60cm" We would like to highlight that it is not guaranteed that these Service providers provide high resolution Imagery at all locations... Kindly confirm that this is accepted by Tanesco	High resolution imagery preferred. It is acceptable for areas that High Resolution imagery are not available.
189	Clarification 2 - Item No. 92	Geographic Information systems	The system must provide capability to collect and update information in the field using mobile devices. What are the information that will be collected from field? How many users will be responsible for field collection?	Information to be collected from field are TANESCO assets infrastructures as described in the bidding document information available from page 379 Users responsible for field collection, design will suggest after detailed design session during blue print phase. But it is expected that data collection will be a going concern for the TANESCO, can vary depending on business need/ growth at the particular time to start with Users responsible for field collection is 750
190	Clarification 2 - Item No. 100	Section 3a	Is defined timeline period of 24 months from completion of pre-commissioning a mandatory? We believe, the defined timeline is aggressive. So, can we propose longer timelines, say 30 months ? If yes, how will it impact evaluation score?	Please refer page No. 54, Item No. 3 (b) of the Amended Bidding document shared to you on 7th October, 2020

191	Clarification 2 - Item No. 106	General	What is the number of residential customer ? Industrial customer?	Residential/Domestic : 2,890,128 ; industrial: 4,387 . Industrial customers are post-paid customers. Domestic customers are pre-paid customers.
192	Clarification 2 - Item No. 116	Background	Current number of employees by location as per table: TANESCO STAFF Can we get the breakup against each Applications/modules/Functions in the legacy application they are using to be mapped in the new Integrated ERP system ,it will help in licensing.	See page 360 to 365 of the Bid Document
193	Clarification 2 - Item No. 120	Training programs including Training Certification OEM Academy (Phase 1)--RMS including GIS and ESB	Please confirm number of core/key users as Training by "Train the Trainer model ".What will be the medium of training Classroom or online?	Proposed Number of Train the Trainer model (ToT) is 80 page 355 . Also TANESCO proposed 50 for Training Certification OEM Academy (Phase 1)--RMS including GIS and ESB as per component 6.2, page 353 in the bidding document, bidder can propose the best mix for various functional modules certifications number inclusive of Developers and technical Training. The training is Classroom training at the OEM Academy venue bidder must cover all required costs tuitions fees,certifications exams fees, per diems,flights to the OEM Academy venue.
194	Clarification 2 - Item No. 121	Upgrades	Please confirm that major Upgrades, Technology enhancements will not be part of this engagement	TANESCO does not expect the bidder to upgrade existing legacy systems. The services will be as per stipulated requirements in the Bid Document. In case of any " major Upgrades, Technology enhancements" of the proposed solutions during implementation as well as during the warranty period, if any such upgrades and enhancements are introduced by the OEMs the vendor will be responsible.TANESCO expects the latest version of proposed solutions to be implemented by vendor.
195	Clarification 2 - Item No. 131		Tanzania Cyber Crimes 2015 Act. We need to have an official copy from Tanesco, so that we can understand or supplement the changing cyber landscapes	Tanzania Cyber Crimes 2015 Act is available to the public Link: http://parliament.go.tz/polis/uploads/bills/acts/1452061463-ActNo-14-2015-Book-11-20.pdf
196	Clarification 2 - Item No. 144	Customers Categories & Count	Please provide us with a split of TANESCO customers count between Postpaid and prepaid for all categories (Residential, Industrial, Commercial, Governmental, etc...)	Residential/Domestic : 2,890,128 ; industrial: 4,387 . Industrial customers are post-paid customers. Domestic customers are pre-paid customers.
197	Clarification 3 - Item No. 9	General	In a case of a joint venture, how Tanesco will proceed for the payment ? only a payment via the prime contractor? Or is it possible to pay directly each member of the JV?	Please refer ITB 4.1 and GCC 3.9 of the as-issued BDs. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution.
198	Clarification 4 - Item No. 7	Resource Management System (RMS) covers Functional Requirements from "1 Finance to 11 Project Management " includes GIS and also Technical Requirements Corporate Commercial Management System (CoMS)??? Technical Service Management System (TSMS)???	Which Functional / Technical Requirements fall under CoMS & TSMS. Please provide clarity Does "Revenue & Customer Service" come under CoMS? Please clarify What requirements come under TSMS? Please clarify	TANESCO has grouped anticipated functionality into 3 domains - RMS, CoMS and TSMS. However detailed functional requirements provided in the Bid Document should be used to guide the module breakdown. Breakdown of the 3 domains for the bidders reference is provided in several sections, including the introduction to the functional requirements section on page 150 to 151
199	Clarification 4 - Item No. 11	General	Kindly provide complete information on the volume of data which needs to migrate into new ERP system. Complete Service Book Data - HR All Master Data – Must be migrated All Open Transactions – Must be migrated All transactions in the current financial year – Must be migrated Historical Transactions - How old Historical data needs to migrate if applicable? - What is the volume of Historical data to be migrated? Are this data in Digitized / Electronic format? Usually, customer provides the digitized data in our format and the data is also validated by bidder. Also, Please specify the details of the current volume data which is required to be migrated to new ERP systems. For example: Master Data : Customer, Vendor, Devices / Assets Type of Transaction : Purchase, Quotation, Sales, Billing/Invoice Document Management: Existing volumes / Total Size"	The volume of data to be migrated will depend on migration strategy to be used. It is expected the SI will advise accordingly base on the existing government policies. Data are available in various formats such electronic, manual , the bidder is expected to provide templates for data collection, preparation and cleansing.
200	Clarification 4 - Item No. 13	Ability for the system to adequately supported, i.e. First Level Support; Second Level and Further support; On-line access to Support Desk; Training and Consulting.	Assuming TANESCO will manage L1 and SI will provide only L2 & L3 level supports during Post Go Live (3Yrs.) phase. Please confirm	The bidder will be expected to provide warranty support as per the GCC and SCC. The bidder will not be expected to provide L1 support. Note, difference between availability and SLA. Availability of support centre should be 24x7 SLAs should be as per T-SR-9, T-SR-10 on page 333 and table on page 336
201	Clarification 4 - Item No. 14	General	Assuming TANESCO business working hours (8 hours x 5 days a Week) and will consider similar 5 days a week business working days during implementation and Post Go Live support. Please confirm	TANESCO business working hours is 8 hours per day, 5 days per week, excluding public holidays. For support, availability of support centre should be 24x7 SLAs should be as per T-SR-9, T-SR-10 and table on page 336
202	Clarification 4 - Item No. 17	Page 323 The bidder shall be available to respond 24 hour / 7 days for hardware support during warranty support periods	Assuming 24 hour / 7 days applicable (software & hardware) only to HIGH priority (Severity 1 & 2) tickets only. Please clarify.	Note, difference between availability and SLA. Availability of support centre should be 24x7 SLAs should be as per T-SR-9, T-SR-10 and table on page 336
203	Clarification 4 - Item No. 19	As understood, Total payment percentage entire Contract Price exclusive of all Recurrent Costs	Could you please re-check RFP Payment terms is not exactly 100 of entire Contract Price exclusive of all Recurrent Costs? How "Recurrent Cost - 3 Yrs." Payment will be done "Monthly / Quarterly". Please clarify.	The total is 100% of the contract price. With regards to Recurrent Cost - 3 years, please refer GCC 1.1 (e) (xiii)
204	Clarification 4 - Item No. 20	10.2 The Purchaser shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule	Can SI propose their own project timeline instead of RFP Implementation Schedule which would cover all the TANESCO requirements. Please clarify.	As noted on page 338 , The Bidder may propose variations to this high-level plan with technical justification. TANESCO will accept variations to the implementation schedule at its discretion, based on justification provided. Note : The duration can not exceed project implementation period of 30 months
205	Clarification 4 - Item No. 22	Regarding Supply, installation and implement Centralize GIS system and migrate data from 4 standalone GIS database and others Distribution, Transmission, Real Estate Assets etc.	Could you please share current volume of data into these systems, to be migrate into new GIS system... 4 GIS systems ??? Distribution ??? Transmission ??? Real Estate Assets ???	The existing Standalone GIS Distribution database (4 GIS systems) has approximately 300GB (Total for all). This is for GIS system needs to be migrated. The other asset information in the quantitative data provided are part of the bidder assignment for GIS Data Capturing and uploading. The information of the on GIS data capture for Generation, Transmission, Distribution,real estate assets are available from page 379 to 396

206	Clarification 4 - Item No. 23	Survey	As understood, only data migration from existing systems are in scope and no survey OR survey will be done by TANESCO? Please confirm	Please refer page 223 , 3.1 describing scope of work which Also from page 379 for information on Data capturing into GIS for the Distribution, Generation, Transmission, real estate assets provided quantitative data apart from those captured in the existing 4-standalone GIS database. Data migration from existing systems involve; present data , and data captured during project execution before commissioning. Surveying is part of scope and bidder responsibility.
207	Clarification 4 - Item No. 50	It is mentioned that more details of GIS data is on Background and Information section on page 326	We couldn't find any background information in said page. Please provide the GIS background information	It meant: more details of GIS data is on Background section page starting 379 to 396 and Implementation schedule section on page 338
208	Clarification 4 - Item No. 56	GIS data capture and uploading	we assume that GIS data collection is out of scope for us. TANESCO will use GNS5/drones to collect the GIS data (network element) and same will be supply to us for uploading ?	Not true. Please refer page 223 , 3.1 describing scope of work which include Data capturing and uploading into GIS for the Distribution, Generation, Transmission and real estate assets. Bidder should note GIS Data Capture and uploading is the responsibility of the bidder, end to end. <i>GIS data capture is a technique in which the information on various map attributes, facilities, assets, and organizational data are digitized and organized on a target GIS system in appropriate layers.</i>
209	Clarification 4 - Item No. 57	Data capturing into GIS	what is the size/length of data need that to capture apart from those capture in the existing 4 GIS database?	The size/length of data that need to be captured is provided in the quantitative data for the Distribution, Generation, Transmission, real estate assets from page 379 to 396 .
210	Clarification 4 - Item No. 64		What is the present process of meter data capturing? Are all domestic customer meters prepaid? Since meters are pre-paid do you still get manual consumption readings for the same?	Most of domestic customers are Pre-paid , as per numbers shared in previous clarifications. But still we have few domestic customers who re postpaid and Large customers have Postpaid meters. Yes , We get manual consumption readings for the few postpaid customers.
211	Clarification 4 - Item No. 69		Can bidder propose an implementation of plan that includes some parts of the phase 2 in phase 1?	As noted on page 338 , The Bidder may propose variations to this high-level plan with technical justification. TANESCO will accept variations to the implementation schedule at its discretion, based on justification provided. Note : The duration can not exceed project implementation period of 30 months
212	Clarification 4 - Item No. 73	The currency(is) of the Bid shall be converted into a single currency as follows: Tanzanian Shilling (TZS)	Being a World Bank sponsored bid, many international companies will be participating in this RFP who may not have Local offices in Tanzania to do the TZS billing. Kindly confirm if International companies can quote their pricing in USD.	YES, can quote in USD. The conversion referred is for evaluation and comparison purpose only and not for payment. Further refer ITB 18.2 - The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Purchaser's Country.
213	Clarification 4 - Item No. 75	If the Bidder follows Option 1 or 3, even then, the Bidder shall send the original Bid as per ITB 22.1 for Purchaser's record as per address given in ITB BDS 26.1	There is no ITB 22.1 mentioned in the RFP. Please confirm. We would like to go with Option 3 for submission . Considering the COVID situation, can we submit Hard copies post the situation is stable?	ITB 22.1 is in Section I - "Instruction to Bidders" in the Bidding Document (Page No. 22). And ITB 23.1 is in Section II -"Bid Data Sheet (BDS)" page 42
214	Clarification 4 - Item No. 76	This area of functionality will be related to metering, customer relationship management, billing and collection, customer call (call centres), disconnection and reconnection of electricity supply related to commercial debts and connection of new customers	We see the requirement of Call Center being mentioned in this RFP on page no: 150. Also, same is covered under the pricing sheet in page no: 100 & 101 . There is no clear functionalities of Call Center software are being provided in the RFP. Hence, we request TANESCO to share the functional requirements around CC or is it just the CRM integration required with the existing TANESCO call center software?	The bidder is expected to provide full fledged High End Enterprise Contact Centre Solution to be integrated with CRM, Workforce Management, GIS. The detailed Functional Requirements Call Center will be submitted as an Addendum to the bidding Document. Note: Replaced Call centre with Contact Centre throughout the revised bidding document
215	Clarification 4 - Item No. 77	This area of functionality will be related to metering, customer relationship management, billing and collection, customer call (call centres), disconnection and reconnection of electricity supply related to commercial debts and connection of new customers	Does Tanesco looking for a On premise call center SW or a Cloud Call center software?	On Premise Contact Centre Note: Replaced Call centre with Contact Centre throughout the revised bidding document
216	Clarification 4 - Item No. 82	This area of functionality will be related to metering, customer relationship management, billing and collection, customer call (call centres), disconnection and reconnection of electricity supply related to commercial debts and connection of new customers	Do we need to provide computers, headphones, IP phones etc for all call center agents along with necessary furniture or will it be provided by Tanesco and the bidder just need to provide software, implementation along training and support?	The bidder is expected to provide the full fledged High End Enterprise Contact Centre solution. Furniture will be provided by TANESCO. Note: Replaced Call centre with Contact Centre throughout the amended bidding document
217	Clarification 4 - Item No. 87	Infrastructure OEM	Can bidders quote infrastructure equipment's from Chinese manufacturers (such as Huawei, ZTE, etc.,) being a World Bank funded bid?	The bidder should provide high end Enterprise Class infrastructure to meet the requirements outlined in the bidding document. Our Requirements are open for any high end Enterprise Class infrastructure
218	Clarification 4 - Item No. 88	Change Management Experience	Knowing this is a large transformation program, do bidders need to produce experience certificate of conducting Organisational Change Management solution during ERP implementation in Power Utility sector?	TANESCO will be leading the Change Management Programme. The bidder is not required to produce an experience certificate for delivering an Organizational Change Management program. However, Change Management experience will be an added advantage.
219	Clarification 4 - Item No. 96	General	how many years we have to store the archived satellite images? and we assume that this is one time procurement and yearly update? Please clarify?	Please refer Page. 320 (T-TS-46). " The Bid must include the annual subscription fee /charges for online access to base maps with high resolution at least 50cm for Urban and 1.5m for rural areas for 4 years since commissioning of the project".
220	Clarification 4 - Item No. 97	General	For Field survey we have not seen any specific requirements in RFP, but as per pre-bid query response field survey is within the scope? This requirement needs extensive elaboration in the RFP. There are several queries with regard to that as follows: 1. Volume of assets and customers for which data needs to be collected 2. The RFP does not specify the details that need to be collected from field for each type of assets & customers. There needs to be a data collection template for each type of asset. 3. The pricing table just mentions one line item for providing the price i.e. GIS Data Capture and Uploading on page 105. However the quantities may vary during actual filed survey. You would need to specify quantities and we will provide rates for each class of assets and in case of variations there has to be a clause for charging enhanced quantities at the specified rates.	1 - Volume of asset and customers for which data need to be collected is described in the quantitative data sheets. Please refer Generation, transmission, distribution and estate quantitative data sheet on page no. 379 to 396 2 - Details that need to be collected from the field for each type of asset and customers are specified in the attached sheet for proposed data to be collected. Bidder is required to provide data collection template. Also refer page 322 (T-TS-65) which state that, "The bidder should provide genuine and rigorous field software's for creating data dictionary to support field data collection and exchange/load from GPS to Computer for post processing (field and office software)" 3 - In the pricing table (within GIS Data Capture and Uploading item), you may add addition line item if you have to specify items and quantities.

221	Clarification 4 - Item No. 123		The mobile sub-module must be fully accessed on a mobile device such as phone or tablet. How many users will use the Mobile application? What are the phone/tablet specifications?	The system is expected to provide the functionality. The number of users 750 Also the bidder is expected to provide the sizing specification of the Phone/Tablet capable of running the application.
222	Clarification 4 - Item No. 136	GRC	1. Please clarify if either of the GRC Option is acceptable i. Develop GRC Application or a GRC module and then integrate with Proposed & To be developed New GIS Application OR ii. Embedding with Ready to Deploy market available Benchmark GRC product with Proposed & To be developed New GIS Application	The bidder is expected to provide the proposed solution based on requirements provided. Refer Internal Audit Functional Requirements, IA-1 to IA-45 on page 302 to 307
223	Clarification 4 - Item No. 142	The Bidder may wish to visit and examine the site where the Information System is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense.	We would like to visit TANESCO existing Data Center. This would help us in evaluating the infrastructure and provision for infrastructure required for proposed CMS solution. The request letter has been sent along with the queries.	There will be NO any official site visit arrangements by the purchaser. However, under bidders discretion and own expenses, access to the site will be granted.
224	Page 470	Kindly provide your feedback for the below clarification: It was mentioned in page 470 "Section IX – Special Conditions of Contract" that Eighty percent (80%) of the Total Price of for GIS Data Capture and uploading for services performed will be paid upon completion of GIS Data Capture and uploading. However, we believe that this task will take long period & will require the involvement of a lot of resources in order to be completed.	Therefore, we are humbly requesting TANESCO to change the payment terms as follow: GIS Data Capture and uploading Eighty percent (80%) of the pro-rata Price for GIS Data Capture and uploading for services performed	This item has been amended. Please see Section IX-Special Condition of Contract, 7.Terms of Payment (GCC Clause 12), 12.1 item D(i) on page 484 of the revised BD D.Phase 1 & 2: GIS Data Capture and uploading and Amendment # 5
225	NA	Airborne Survey by Drone	Data requirement: We would like to know if there are boundary coordinates of wayleave of Transmission line. Specifically, we need to establish Wayleave dimensions for the following Categories of Transmission Lines? (i) High Tension 400kV (Widths & Lengths, Route centerline coordinates), (ii) High Tension 220kV (Widths & Lengths, Route centerline coordinates), (iii) Transmission Line 66kV & 33kV (Widths & Lengths, Route centerline coordinates), (iv) 11kV & 0.4kV (Widths & Lengths, Route centerline coordinates), (v) Switch Yards and Substations Spatial location and boundary coordinates if possible, supply google KML files for quoting/costing the airborne survey by using drone?	We don't have boundary & Route centerline coordinates of way leave of Transmission line, this is part of bidder responsibility on GIS data capture. The length of transmission and distribution lines in kilometer have been provide on the Distribution and Transmission Quantitative data on page 380 and 381 respectively. We do not have Switch Yards and Substations Spatial location and boundary coordinates as well as google KML files.
226		Airborne Survey by Drone	Data requirement: It was mentioned that four regions have been surveyed. We would like you to confirm whether those survey data (both airborne and GNSS handheld data) of the four (4) surveyed regions do suffice or don't?	TANESCO does not have drones at the moment, it is part of scope now to acquire drones. GNSS handheld data of the four (4) surveyed regions suffice to be used for migration as per scope of Work page 223 and information provided for existing standalone GIS databases on page 379, however the bidder is expected to consider the data provided on page 380 for Distribution Quantitative data for the 4 regions (Ilala, Kinondoni North, Temeke, Coast(Pwani)) for the data capturing and uploading as per information provided.
227	NA	Airborne Survey by Drone	Coordinate System: In Tanzania, there are three coordinate systems at use which are Arc1960, WGS84 and TAREF11 (Tanzania Reference Frame 2011). We would like you to confirm which one will be adopted We recommend that TAREF11 to be used since it's a latest one and its network is well distributed all over the country. Moreover, it was mentioned in section GS-108 that the system must provide capability to conversion and transformation of coordinates systems from World Geographic System (GCS) to Universal Transverse Mercator (UTM) System and vice versa. However, it is known that both TAREF11 and WGS84 have a global reference ellipsoid. Please clarify about this one too.	TAREF11 will be adopted, However as per GS-108 the system must provide the conversion and transformation capability as requested and quantitative data provided
228	NA	Airborne Survey by Drone	Site Visit: We recommend that site visit is done for some few sites which will be taken as samples for other sites. Site visit will be necessary for us to have an understanding of features to be surveyed and mapped and prepare the realistic quotation for airborne survey services. In addition to that we also recommend that consultation with the departments of Estate, Transmission and Distribution is necessary in order to confirm and clarify issues related to availability of spatial data and legitimacy of the right of ways. Therefore, it will be appreciated if you can grant access to our team to visit several selected sites.	There will be NO any official site visit arrangements by the purchaser. However, under bidders discretion and own expenses, access to the site will be granted.
229	NA	Data Capture by GNSS Handheld	As long as data capture is part of our scope, we would like to have access to review the existing databases and the data structures to identify the gaps and thereon improving the existing databases. Please advise.	Access will be provided to bidder to review existing databases and the data structures to identify gaps for improvements.
230	N/A	Engineered or Hyper Converged system	It was mentioned earlier that Engineered or Hyper Converged system NOT Acceptable. However, we would like to highlight some of the benefits that the engineered system can provide: 1. Engineered systems would optimize/reduce your database licenses and ongoing support costs – would you reconsider a solution incorporating Engineered systems 2. Engineered systems are purpose built to perform a specific function with very high availability and performance, this would ensure uptime, unparalleled performance, handling of multiple workloads e.g. data warehousing, Analytics, OLTP without the need to acquire additional equipment. 3. The Engineered systems are engineered with very high Data compression technology reducing your disk storage requirements by up to a minimum of 5 times and also reduced Network backup traffic by the same metric. 4. The machines are engineered with Machine learning and Artificial Intelligence reducing routine database administration tasks like indexing. 5. Machine is equipped with large amounts of memory – volatile and persistent memory in addition to flash storage and high speed server to storage connectivity (100 Gbps) resulting into high performance. In-memory computing comes as a default. Therefore, we highly recommend that TANESCO reconsider those benefits and allow the usage of engineered / hyper converged system.	Bidders are required to comply with requirements specified in the bidding document accordingly.
231	NA	Load balancer	Please advise if you have an existing load balancer that can be used for the solution or it must be included in the bidder's scope of work & supplies	Load balancer is not part of the requirement. Bidder has to provide a solution that meet performance requirements specified in the Bidding Document
233	T-SR-2	As per the tender's requirements, the warranty should be 36 months after the operational acceptance; however, we would like to highlight the following:	o For instance, bidders are supposed to purchase the drones from day zero to be able to start the survey. Therefore, the warranty – according to the manufacturer - will begin. Accordingly after finalizing the whole implementation (around 30 months); the remaining warranty period for the drones will be only 6 months. In order to fulfill the warranty requirements, we have requested from all vendors to expand the warranty to be 5.5 years. However, the following challenges appeared: ⊖ The prices will be huge. ⊖ Most of the vendors don't accept to provide this long warranty period – even if it will be against extra fees. Hence, please advise if the warranty can start with each item separately based on the purchase date	Refer T-SR-3 page 332 for Hardware warranty and a note on page 357 of Bidding Document which states that " * Hardware warranty will be effective upon hardware commissioning for a period of 36 months. As different modules commissioning will vary, this should be adjusted accordingly to align to the agreed implementation schedule "