A Joint Venture of Andhra Pradesh Gas Distribution Corporation Ltd. and
Hindustan Petroleum Corporation Ltd

REPLIES TO BIDDERS QUERIES

Date: 03.08.2021

Tender Document No: GGPL/C&P/SR 2593/2021-22/04   dated 27.07.2021

**Subject: Tender for Hiring of Contract for Development of Web & Mobile Application
including Mapping GGPL Assets in Geographical Information System (GIS).**

The following modifications to the subject tender is hereby authorized

S. No.	Description	Page No. / Clause No.	Amendment/Addition/ Modification
1	REPLIES TO BIDDERS QUERIES	-	As per Annexure-I of this document

All other terms and conditions of tender document remain unchanged

Authorized Signatory

REPLIES TO THE QUERIES

S. No	Tender Reference	Subject	Bidder Query	GGPL Response
1	Scope	Mapping of existing assets	Do you expect bidder to conduct any field survey?	No
2	Technical Qualification criteria	Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application & mapping of existing assets, network and extension of City Gas Distribution entity in preceding seven (07) years prior to the Final Bid Due date.	Do you expect bidder to provide domestic (within India) work order or can it be Global?	Domestic shall be preferable however Global will also be considered
3	Technical Qualification criteria	Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application & mapping of existing assets, network and extension of City Gas Distribution entity in preceding seven (07) years prior to the Final Bid Due date.	Can you please consider Gas Utility experience with Distribution network experience?	Tender Conditions Prevails
4	Scope	The Contractor is required to maintain all Registers and other records in an office within the premises of GGPL or at a place within a radius of three kilometres.	As the scope is related to application development, can we propose onsite/offsite model for execution?	Yes

5	Scope		Since the scope is related to application development, can you please consider having ISO and CMMi certification as one of the qualification criteria?	Tender Conditions Prevails
6	Scope		We understand that the vendor need to cost the Cloud based deployment for hosting the data and Web / mobile solution.Do you expect the solution on 3-tier or 2-tier architecture.	3 Tier
7	Scope	Entire network view ability on one platform to manage database.	Do you expect the Web based GIS Solution to provide network trace capability. Like Up stream trace, Down stream trace, shortest path, and connected.	Both Web & Mobile GIS Solution
8	Scope	Entire network view ability on one platform to manage database.	Do you expect the Web based GIS Solution to provide network trace with barriers of the trace that prevent the trace from traversing beyond that point in the City Gas network.	Both Web & Mobile GIS Solution
9	Scope	All network extensions and expansions to be mapped and updated in GIS with geo-referenced co-ordinates for better identification.	Do the Web and Mobile solution adopt the network topology, connectivity rules when the new data, edit of data and update of data is performed to have data validity and avoid errors.	Yes

10	Technical Qualification criteria	Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application & mapping of existing assets, network and extension of City Gas Distribution entity in preceding seven (07) years prior to the Final Bid Due date.	Do you expect bidder to provide experience on the same technology proposed for this proposal with respect to Web GIS and RDBMS	Yes
11	Scope	Entry of the new constructed pipeline locations and customer base information to the user groups.	Do you expect integration of the GIS with any of your existing Asset Management systems?	GGPL not having any Assest management system
12	Scope		Do you expect the GIS design with standards? Should it be adopting model of Pipeline Open Data Standard (PODS) data model as industry standard or Utility and Pipeline Data Model (UPDM) which is a widely adopted data model for operators of standalone or vertically integrated gas and hazardous liquid pipe networks	Yes
13	Scope	As-built, Backfilling sketches, D-PNG Customers data, G.I Isometric Sketches shall be provided by GGPL.	What is the format of these files? How many files exist in each type that need to be uploaded to the new GIS database by the vendor?	DWG, PDF, KML, Ms-Excel files. And files sizes are unknown at this stage.
14	Scope	For new customer new form will be open. If the data has been filled at customer location, the app will automatically collect the Latitude / Longitude values.	Should the mobile app should be map interactive or just a form with no map interface?	Yes, Map interactive
15	Scope	Displaying the data with Bing maps / Google Maps / Satellite images with background.	Do you have subscriptions for the Bing maps / Google Maps that can be used?	No

16	Scope	Displaying the data with Bing maps / Google Maps / Satellite images with background.	What are the Satellite images that are available?	Not available
17	Scope	Database exported into Excel / PDF.	Do you expect any reports out of the Web application?	Yes
18	Scope	Map export into PDF / JPG	Is this requirement a print to scale with legend?	Yes with legend
19	Scope	Displaying Gas Pipeline layers with different colors and Dia for steel and PE network	Do you have any symbology to be adopted in the map services and Web application.	We will provide
20	Scope	Hyperlinking of existing documents such as as-built sketches, test commission reports can be attached to the pipeline.	Do you expect a tool that allows users to hyperlink the documents using the Web application and view them later?	yes
21	Scope	Model view: Emphasizes spatial analysis. Focuses on analysis and modelling in which GIS is seen more as a spatial information science than a technology.	Do you have any database license that can be used? Or it need to be procured?	No
22	Scope	Model view: Emphasizes spatial analysis. Focuses on analysis and modelling in which GIS is seen more as a spatial information science than a technology.	Do you have any database license and Spatial data work in a versioned environment to allow multiple user to edit from both desktop GIS and mobile GIS?	No
23	Scope	Combination of residential and commercial buildings	Do you have any land base layers to be published in map view? Provide details about that data set?	Yes, Area Survey reports avialable in PDF & SHP file
24	Scope	Accessibility: computers, mobile phones, tablets, and users who are not GIS experts.	Do you expect the web application also mobile compatible?	Yes

25	Scope	Features of Mobile app.	Do you expect the mobile application work with external GPS devices for accurate information collection?	No
26	Scope	The existing MDPE and Steel network data to be converted into GIS shapefile from KML format or from the DWG format which is available with GGPL.	Do you expect an ETL tool used to make current and future data conversions adopt a single process?	Yes
27	Scope	Model view: Emphasizes spatial analysis. Focuses on analysis and modelling in which GIS is seen more as a spatial information science than a technology.	What kind of spatial analysis is expected to be available from the GIS Server and desktop software's using the spatial database created and hosted?	Queries and reasoning, measurements, transformations, descriptive summaries
28	Scope	Development of Web & Mobile application within 3 months. Training and uploading of data in Web server 3 months. Post development maintenance for 6 months. Web services 18 months.	Do you expect the vendor responsible for data loading and make upgrades to the software with the new product releases during the 18 months of web services maintenance / contract period?	Yes
29	Scope	Development of Web & Mobile application within 3 months. Training and uploading of data in Web server 3 months. Post development maintenance for 6 months. Web services 18 months.	Who will be responsible for GIS data correction if issues were identified?	Vendor
30	Scope	Development of Web & Mobile application within 3 months. Training and uploading of data in Web server 3 months. Post development maintenance for 6 months. Web services 18 months.	Do you have a DB team to maintain the DB or expect the vendor to provide the same support?	No

31	2.0.1 TECHNICALCRITE RIA:	1. Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application & mapping of existing assets, network and extension of City Gas Distribution entity in preceding seven (07) years prior to the Final Bid Due date.	We request GGL to accept National international project reference.	Will accept.
32	2.0 Scope of Work	Application to be developed using open source software and bidder is the responsible for maintenance of server and data for the period of 18 months initially.	We request GGL to allow OGC complaint GIS solution proven in Industry should be allowed to participate	OGC complaint GIS solution allowed
33	Page No 181 Point No 3.10	Finding details village wise / Charge area wise	We understand that Map Data is required to do this analysis. Can you pls let us know if you are going to provide the map data? If yes, pls do let us know the format	As built data and Area survey report data will be given in PDF, DWG, KML file types
34	Page No 180 Point No 3.9	Development of GIS application using open-source software.	If any commercial out of the box industry products is offered, will the proposal be considered.	No
35	Page No 179 Point No 3.2	All network extensions and expansions to be mapped and updated in GIS with geo-referenced co-ordinates for better identification.	How much network extension capability is required. What is the planned network expansion Size and Potential customer count? Can you pls the volumetric of the existing network?	Volume is not known at this stage.
36	Page No 180 Point No 3.9	Display the GIS data layer wise i.e., showing with different symbols/ colors.	We understand that symbols and styles will be provided by Godavari Gas	Will be provided
37	Page No 180 Point No 3.8	Accessibility: computers, mobile phones, tablets, and users who are not GIS experts.	For how many users sizing to be done for mobile and web	20 Persons

38			Do you have any preference of cloud Service provider Azure/AWS/ Google ?	No prefrence.
39	SECTION VI/SCOPE OF WORK 3.0 REQUIREMENTS 179	3.5 The System should be able to display the following information (not limited to): b) As- Built pipeline network.	We understand that system will be capable to open and view of a pipeline AutoCAD file directly from the system.Kindly confirm.	• DWG & Pdf files of existing network will be provided and this needs to be converted into .shp files, so that shp files may viewable in GIS system.
40	SECTION VI/SCOPE OF WORK 3.0 REQUIREMENTS 179	3.5 The System should be able to display the following information (not limited to) : Schools Fire Stations · Hospitals · Police Stations · State offices f) Residential buildings g) Commercial buildings h) Combination of residential and commercial buildings	Who will provide the information details/land base data?	• GGPL will be provide the Area Survey report which will shows all general places incl. Domestic, commercial, industrial etc.
41	SECTION VI/SCOPE OF WORK 179 3.0 REQUIREMENTS	3.5 The System should be able to display the following information (not limited to) : e) Landmarks near the pipeline network. Schools Fire Stations · Hospitals · Police Stations · State offices f) Residential buildings g) Commercial buildings h) Combination of residential and commercial buildings	How satellite imagery will identify which one is the residential building or commercial building. Is there any field survey work included in the scope of bidder? Kindly clarify.	• Area survey report will be provided.

42	SECTION VI/SCOPE OF WORK 180 3.0 REQUIREMENTS	3.10 Features in web application Finding customer details based on phone number / meter number / customer name / CRN No. etc.	Kindly confirm that GGPL will provide the details. There is no field survey requires in the bidder scope.	• Existing customers details will be given in excel file format
43	SECTION VI/SCOPE OF WORK 181 3.0 REQUIREMENTS	3.10 Features in web application Displaying the data with Bing maps / Google Maps / Satellite images with background.	We understand that client is looking for freeware map service for displaying the data. Kindly confirm.	• Yes,
44	SECTION VI/SCOPE OF WORK 181 3.0 REQUIREMENTS	3.10 Features in web application Displaying the data with Bing maps / Google Maps / Satellite images with background.	Kindly confirm that routing service is not included in the scope.	• Existing / Laid pipeline routes will be given in Pdf or DWG or KML file formats. · Routing facilities for new pipeline / proposed pipeline should be available in the Mobile application.
45	SECTION VI/SCOPE OF WORK 3.0 REQUIREMENTS	3.11 Features of Mobile app. Once the data is saved, this will be displayed on the map.	Inspection/ field data approval by nodal/in-charge is not included in the scope. Kindly confirm.	• Yes, In-charge will authenticate for final upload.

46	SECTION VI/SPECIAL CONDITIONS OF CONTRACT (SCC 182 2.0 Scope of Work	GGPL has already having Land Base Details for MDPE Network which is having the road network, existing drainage network, Building details such as residential, commercial, Industrial etc. GGPL has also laid several MDPE and Steel Pipelines across their Geographical Area. For these, the as-built drawings, test commission reports are available with GGPL. GGPL installed meters to their domestic, commercial and Industrial customers and supplying Gas. As per the PNGRB guidelines, all the network data along with their asset details are to be mapped in GIS.	GGPL will provide the pipeline network data in which format. Kindly provide the file format of the existing data.	• Pipeline network data will be provided in the PDF, DWG, KML files.
47	SECTION VI/SPECIAL CONDITIONS OF CONTRACT (SCC 182 2.0 Scope of Work	GGPL has already having Land Base Details for MDPE Network which is having the road network, existing drainage network, Building details such as residential, commercial, Industrial etc. GGPL has also laid several MDPE and Steel Pipelines across their Geographical Area. For these, the as-built drawings, test commission reports are available with GGPL. GGPL installed meters to their domestic, commercial and Industrial customers and supplying Gas. As per the PNGRB guidelines, all the network data along with their asset details are to be mapped in GIS.	Digitization of network data to convert existing network data into OGC compliance GIS format is included in the scope. Kindly confirm.	• Yes.

48	9 & 2.0.1 BEC	Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application & mapping of existing assets, network and extension of City Gas Distribution entity in preceding seven (07) years prior to the Final Bid Due date.	2. Bidder must have completed at least one work order/contract for executing similar works as Development of web enabled GIS application along with mobile application of State Govt entity inpreceding seven (07) years prior to the Final Bid Due date. 2. Bidder must have completed at least one work order/contract for executing similar works as mapping of existing assets, network and extension of any State Govt entity in preceding seven (07) years prior to the Final Bid Due date.	• Tender Clause conditions prevails
49	180 & IV & 3.8Accessibility	computers, mobile phones, tablets, and users who are not GIS experts.	How many number of authentic organization user need to access	• 20 Persons (Editable - 10& Viewable - 20)
50	180 & IV & 3.9 Web application & Mobile application functionality	The existing MDPE and Steel network data to be converted into GIS shapefile from KML format or from the DWG format which is available with GGPL.	This is desktop level functionality and not web related functionality	• As per Scope of work.
51	180 & IV & 3.10 Features in web application	Application functionality is based on user role.	Please mention type of roles i.e, Field worker, administrative etc.	1. Field person 2. In-charge
52	Section VI **179** **1.0 SCOPE**	(c) Training & Post Development Maintenance	How many persons are required to be trained? Please clarify Will the training be online or at client location? - please clarify.	• 20 Persons Either online or at site.

53	Section VI 182 2.0 Scope of work	As per the PNGRB guidelines, all the network data along with their asset details are to be mapped in GIS.	What is size each of existing data available with GGPL? What are the formats in which network data are available?	• Size of the file not known at this stage. · Data available in DWG, PDF, KML and Excel formats.
54	Section VI 179, 3.3 Requirements	Entry of the new constructed pipeline locations and customer base information to the user groups.	We assume that data editing, like adding new pipelines and modifying the existing ones will be done in GIS Desktop? Please clarify Does GGPL has any desktop GIS software in use? Please clarify	• Editing existing pipelines / data and adding new pipelines / data should be done through Desktop and mobile also. · GGPL doesn't have any desktop GIS software. (This GIS software needs to be developed (for the same tender is floated) by vendor. It is also the scope of work to this Tender)
55	Section VI 179 3.4 Requirements	The system should be able to integrate the newly added maps of new pipeline activity to the existing maps andprovide seamless integrated view to the users.	Please clarify the expected data update workflow	• System should able to integrate newly added pipeline and existing pipeline in the map
56	Section VI 179 3.5 Requirements	The System should be able to display the following information (not limited to) : a) Pipeline coverage. b) As- Built pipeline network. c) Type of the Pipeline (Steel / MDPE). d) Thickness / Grade /Size of the Pipeline. e) Landmarks near the pipeline network. · Schools · Fire Stations · Hospitals · Police Stations · State offices f) Residential buildings g) Commercial buildings h) Combination of residential and commercial buildings i) Customer Registration Number (CRN)	We assume all these data are available with GGPL. If available what are the available data and its formats? Please clarify	• GGPL will provide area survey report in the PDF or shp file formats.

57	Section VI 179 3.7 Requirements	Data base view: Unique database of the world- a geographic database.	Is it a regular geo database? Need more clarity on the unique database term	• Yes
58	Section VI 180 3.8 Requirements	Accessibility: computers, mobile phones, tablets, and users who are not GIS experts	How many users are expected to use this application? What is peak concurrent access expected? Please clarify	• 20 users · Multiple users at the same time (max 10 users simultaneously).
59	Section VI 180 3.9 Requirements	Development of GIS application using open- source software	Is there any preferred Open- Source software? For example, • PostgreSQL for Database • QGIS for Desktop, • Geoserver for Web Server Please Clarify	• No preferred open- source software.
60	Section VI 1813.10 Features in Web Application	Hyperlinking of existing documents such as as-built sketches, test commission reports can be attached to the pipeline.	Where are the documents expected to be stored? What is the volume of data expected to be stored? Please clarify	• To be stored at Cloud storage. · Volume is not known at this stage.
61	Section VI 182 2.0 Scope of work	The cost of the domain registration is also bidder's responsibility, if GGPL wants to register a domain.	Domain registration/renewal is recurring annual expense. Please clarify on payment terms	• If such services availed, then payment will be on monthly basis
62	Section VI 182 2.0 Scope of work	Training and uploading of data in Web server 3 months.	What is expected training period? How much data volume to be uploaded to Server?	• Within 3 months and depends on user friendlyness of software developed. · Volume not known.

63	Section VI 182 2.0 Scope of work	Bidder may provide their own server or may use Amazon web services, Microsoft azure, google cloud or any other commercial web server for hosting the website.	Is there any backup and disaster recovery solution required? What is expected backup frequency? What is expected retention periods for the backup	• Not envisaged.
64	Section VI 182 2.0 Scope of work	Development of Web & Mobile application within 3 months. Training and uploading of data in Web server 3 months. Post development maintenance for 6 months. Web services 18 months.	Will Web services support for 18 months starts from date of deployment? Please clarify.	• Yes
65	Scope		Will GGPL provide necessary workstations for staffs to do their day-to-day operations?	• No
66	Scope		We request GGPL to extend the bid submission date at least by 15 days.	Tender conditions prevails.
67	VI 179 3.1 Requirements	Entire network view ability on one platform to manage database.	Request to provide information on the existing data available with the organisation (formats and data types)	DWG, PDF, KML
68	VI 179 3.4 Requirements	The system should be able to integrate the newly added maps of new pipeline activity to the existing maps and provide seamless integrated view to the users.	With a centralized GIS database, the newly added GIS features can be appended to existing feature classes to provide a seamless view. A common web map can be used for Visualisation	Yes

69	VI 179 3.4 Requirements	The System should be able to display the following information	The data contains demographic information like Landmarks near the pipeline network. Please inform if this data is will be provided by GGPL to ingest into the system, or current and up to date data should be supplied by the solution provider. • Schools • Fire Stations • Hospitals • Police Stations • State offices f) Residential buildings g) Commercial buildings h) Combination of residential and commercial buildings f) Residential buildings g) Commercial buildings h) Combination of residential and commercial buildings i) Customer Registration Number (CRN)	Survey data available and same will be shared
70	VI 179 3.7 Requirements	Model view: Emphasizes spatial analysis. Focuses on analysis and modelling in which GIS is seen more as a spatial information science than a technology.	Request to provide information on the Spatial Analysis tools that are anticipated to be used for this requirement	Queries and reasoning, measurements, transformations, descriptive summaries,
71	VI 180 3.9 Requirements	Development of GIS application using open- source software	We request to change the terms to OGC complaint software . This helps in getting various best in class , robust solutions for this bid. The solutions have out of the box Web and mobile apps that can be used which minimizes the effort for development and reduces time taken to Go- Live	open- source software / OGC complaint software

72	Scope		How many mobile users are anticipated to collect or update data from the field.	20 users
73	Scope		We understand that the Web application is for viewing and querying the data. Will there be a requirement to perform feature editing on the Web.	Yes
74	Section- Clause 11.2	Bidders are requested to refer instructions for participating in E-Tendering enclosed herewith as Annexure-III and the ready reckoner for bidders available in http://www.godavarigas.in Bids submitted manually shall be rejected, the bids must be submitted on GGPLs E-tendering website as follows:-	It is mentioned that this is a manual bid but here it is mentioned as manual bids will be rejected. Please clarify	Tender is manual. Bids to be submitted within due date.same was mentioned in Biding data sheet.
75	Section- Clause 10	In case after price bid opening the lowest evaluated bidder (L1) is not awarded the job for any mistake committed by him in bidding or withdrawal of bid or modification of bid or varying any term in regard thereof leading to retendering, GGPL shall forfeit EMD paid by the bidder and such bidders shall be debarred from participation in re-tendering of the same job(s)/item(s). Further, such bidder will be put on holiday for a period of six months after following the due procedure.	In such a scenario, will it be re-tendered or will the bid be awarded to L2	Default bidder will not be considered and remaining bidders shall be considered for further evaluation.