

Customer : M/s Directorate General of Hydrocarbons (DGH)					
Project Name: Real Time Measurement System (RTMS)					
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	ABB Queries	TQ-1_DGH_Reply
1	65	54 to 57	Requirement: Analytics and Machine Learning	Please clarify on the requirement of analytics and machine learning as there is no data history and for data analytics and to build machine learning model, we need good amount of data, at least 6 months.	> Software should have capability for analytics and machine learning > Feature may be utilised after sufficient data is available
2	66	2.4.6	Software Hosting (Cloud Infrastructure)	Please clarify who will handle ABB software deployment which includes scalability, performance, required hardware resources	Refer to 2.4.11 on page 68. Hardware scalability will be done by DGH
3	67	2.4.6.3	Delivery Period, Installation & Commissioning Period and Penalties	ABB request DGH to clarify the urgency to deploy in 60 days? (from our past experience requirements analysis will take more than 3 months)	The delivery / deployment period of standard RTMS software in DGH servers will be 60 days. However, customisation of software , Field Testing of RTMS solution in all respects should be completed and delivered within 120 days from the date of LOA.
4	57	1.4. (3)	Architecture Description 3. Sensors and devices installed at the oil field are to provide data in digital Modbus RTU/equivalent format on RS485/equivalent. The Field RTU/equivalent will directly poll the connected sensors and devices at regular intervals of 30 min.	Will the communication provider convert the data (from all devices) to OPC UA (from any protocol) - We understand from requirements that any protocol should be supported. Please Confirm.	>RTMS vendor will facilitate the task of converting data from field units to RTMS software compatible protocol.
5	57	1.4. (3)	Architecture Description 3. Sensors and devices installed at the oil field are to provide data in digital Modbus RTU/equivalent format on RS485/equivalent. The Field RTU/equivalent will directly poll the connected sensors and devices at regular intervals of 30 min.	Sensor or transmitters (e.g Pressure transmitters, Temperature transmitters) installed at Oil field cannot provide data over RS - 485. Is 4 - 20 mA signal allowed ?	Yes. However sensors are to be provided by the DSF/ field Operators.

6	57	1.4. (2)	<p>Architecture Description</p> <p>The solution should use internet as backbone network for connectivity between the FRTU/equivalent and DGH cloud servers. It should support internet via GPRS and ETHERNET connectivity. The solution design should also have the capability to support SATCOM based communication where GPRS or ETHERNET based internet connectivity is not available.</p>	Please confirm the minimum bandwidth of internet connectivity available on sites (including on remote locations).	The Bandwidth should be sufficient to capture the data from FRTU; and RTMS software should be capable to capture data and operate in lower bandwidth. However, Bidder may explore by themselves regarding bandwidth availability at site and DGH will assist in communicating with DSF operators.
7	61	7.g	The Web Application should support ability to generate custom reports as required by DGH.	ABB request DGH to please confirm the schedule in which the custom report format will be finalised as we have to meet the deadline of 60 days for implementation.	Report formats will be finalized with the vendor in the first 60 days of LOA and it will be a parallel activity to establishment of RTMS. However provision of flexible formats by ticking on the parameters captured by RTMS software, should be a feature of the software. Total fixed formats not to exceed 35 (thirty five) Nos.
8	63	23, 24 & 25	Requirement : Dashboard	ABB request DGH to please confirm the schedule in which the custom dashboard format will be finalised as we have to meet the deadline of 60 days for implementation.	It is expected that bidders will be providing standard dashboard of the software with comprehensive features. If DGH desires to change it, it will be confirmed within first 60 days. Estimated no. of standard reports may not exceed 35 (thirty-five).
9	62	2.4.2 (7)	Should support Read Only Domain controllers for enhanced security.	We understand it is Active Directory integration. Please Clarify.	Clause stands deleted.
10	60	4.a	Calibrations: The Web Application should support configuration of manual calibration of the sensors. These calibrations should be stored in the database and applied to each raw reading once it arrives on the server. An audit log is required to be maintained for each of the calibrations change.	The Web Application should support configuration of manual calibration of the sensors. How is it possible since RTMS cannot access the instruments directly.	The Web Application is not required to support configuration of manual calibration of the sensors. However, the application should facilitate storage of calibrations schedule / parameters etc including data relating to each of the calibrations change.
11	General	General	General	Please confirm the infrastructure provider and its scope of supply and responsibility for stable network and communication?	DSF Operator will provide the basic infrastructure for communication from instruments to FRTU and FRTU to DGH Cloud Server, at site. However communication services (All operating cost including purchasing of SIM, rental and service charges of communication channels etc) should be provided by the RTMS contractor.
12	General	General	General	In event of lack of proper network and communication and due to which system performance impacted who will be held responsible?	See point no. ii of SCC under Annexure-IIIB, page 53 and reply to Query no. 44.

13	General	General	General	We understand that RTMS software is required for monitoring and regulatory purpose and not for supervisory control. Please confirm.	Yes
14	General	General	General	We understand that the supply of FRTU is in the scope of the bidder of this tender. Please confirm.	See point no. iii of SCC under Annexure-IIIB, page 53
15	General	General	General	We understand that the supply of field instrumentation is in the scope of the bidder of this tender. Please confirm.	See point no. iv of SCC under Annexure-IIIB, page 53
16	General	General	General	Please clarify the schedule of Contract Area readiness for establishing FRTU connectivity. Also, if FRTU is not ready in 60 days, how to demonstrate SAT.	The Schedule of Contract Area(s) will be finalised with the winning Bidder. Providing FRTUs for SAT (site may be RJ-ON-90/1 or RJ-ON/6 and a field of Western offshore / or as mutually agreed during Site Acceptance Test) is the responsibility of the bidder. The delivery / deployment of RTMS software in DGH servers will be 60 days. However, customisation of software , Field Testing of RTMS solution in all respects should be completed and delivered within 120 days from the date of LOA.
17	General	General	General		
B					
18	15	32.1	Within 21 (Twenty-one) days from the date of issue of LOA / NOA by DGH, the successful Bidder shall furnish the Performance Security in accordance with the conditions of the contract in the form provided at Appendix3 of Annexure - I and must be in the form of Bank Guarantee from any Nationalised / scheduled Bank in India on non-judicial stamp paper of requisite value, as per Indian Stamp Act, purchased in the name of the Banker.	We request M/s DGH to confirm Security Value (%) Please also clarify 10% of what value of the Contract BG to be submitted and validity of the same. (Contract duration is 5 Years)	To be guided by tender conditions
19	36	4.3	Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.	Take note-subjective criteria. Work will be performed in line with the technical specifications.	Agreed. But DGH will provide the completion certificate.
20	34	1.9	CONTRACT PRICE The prices will remain firm during currency of the CONTRACT unless specifically agreed to in writing by DGH.	Prices shall be revised on account of (i) change in the applicable law/s and (ii) extension of the delivery period not due to the default of the Vendor	Change in tax structure is acceptable. Price variance for any other reason is not acceptable

21	40	11.3	Invoices with original supporting documents duly countersigned by the DGH's representative/ engineer wherever applicable will be submitted as per the payment schedule (Refer Special Conditions of Contract) by the CONTRACTOR to DGH and payment shall be made within 21 (twenty one) calendar days from the date of receipt of invoice at the above office.	We request M/s DGH to delete this clause from tender	To be guided by tender conditions
23	43	17	SECRECY The obligation is continuing one and shall survive after the completion/ termination of this agreement.	The confidentiality obligations cannot survive in perpetuity. It should survive either for 3 or 5 years from the the completion/termination of the contract	No Change
24	45	21	TERMINATION	Contractor shall have the right to terminate the contract on account of failure by DGH to make payments	No Change
25	47	23.12	Contractor's un-cleared debt arising out of execution of the Contract.	The purpose of this clause is not clear, kindly clarify or delete this clause	No Change
26	50	29.5	It is also agreed between the parties that neither party to the arbitration shall be entitled to the interest on the amount of award.	We request M/s DGH to delete this clause from tender	No Change
27	52	34.C	DGH shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.	We request M/s DGH to delete this clause from tender	No Change
28	54	3	Payment Terms AMC charges for item-1 from 2nd Year onwards.	We need payment of AMC on quarterly basis instead of year end.	AMC payment shall be released on quarterly basis
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Siemens Queries	TQ-2_DGH_Reply
29	57	Annexure-IV Page 57	4. The data acquired from these devices will be wrapped in ISO standard (ISO/IEC PRF 20922), that is secure MQTTS protocol, for better utilisation of bandwidth and lower data latency.	Which version of the MQTTS has to be supported?	As per solution design. (However Architecture Description is only for comprehension of the bidders.)
30	57	Annexure-IV Page 57	4. The data acquired from these devices will be wrapped in ISO standard (ISO/IEC PRF 20922), that is secure MQTTS protocol, for better utilisation of bandwidth and lower data latency.	For process Industries use of DNP3 or IEC 870-5-104 telecontrol protocols are standard and widely used. Please advise, whether DGH allows use of different protocol instead of MQTT?	Secure MQTTS protocol, as it is acceptable to all.

31	58	Annexure-IV	1.5 Process Flow (Just for Comprehension of the bidders) Data pushed on regular Interval (10 min)	Interval 10 min does not match the 1.4Architecture Description of interval 30 min. Is the interval 10 or 30 minutes?	Architechture Description is only for comprehension of the bidders. Time interval is 30 Minutes.
32	58	Annexure-IV	The Scope of Work of the Contractor includes Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the "Real Time Commissioning of the "Real Time Measurement System (RTMS)" software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells.	Is in this "Real Time" te be read as data with interval of 10 min or more?	Time interval is 30 Minutes.
33	59	Annexure-IV Page 59	2.3.3. Real Time Two Way Persistence Connectivity - The software should provide persistent two way connectivity between the hardware client and the DGH Cloud Server. It is based on IoT based push connectivity so that fixed IP are not required at all. It should take care to provide high data uptime and any network or server downtime to ensure high data availability.	"Real Time Two Way Persistence Connectivity" does match the Data push interval of 10/30 min. Real time is based on seconds not on minutes. How do we have to interpret this requirement?	Data push interval is 30 min
34	59	Annexure-IV Page 59	2.3.4. Device Management - The software should shows online or offline status of device. It should allow rebooting and troubleshooting of the remote client via the web interface to resolve client issues remotely. Online configuration of remote devices should be available.	Does the "Device Management" include the remote reading of the HART device settings so there is no change of tampering with the transmitters?	Yes.
35	60	Annexure-IV Page 60	Calibrations a. The Web Application should support configuration of manual calibration of the sensors. These calibrations should be stored in the database and applied to each raw reading once it arrives on the server. An audit log is required to be maintained for each of the calibrations change.	Does this "Calibration" mean support of HART communication to the transmitter?	The Web Application <u>is not required</u> to support configuration of manual calibration of the sensors. However, the application should facilitate storage of calibrations schedule / parameters etc including data relating to each of the calibrations change.
36	62	Annexure-IV	2.4.2 Detailed Functional Requirements The following detailed functional requirements should be complied with: S No. Functional Requirement Requirement: Administrator Interface and User Managem ent	Are these requirements related to the RTMS system software or user device / Web interface.	Web Interface/ user device of RTMS Software

37	65	Annexure-IV	Requirement: Analytics and Machine Learning 54 Capability to implement machine learning algorithms based on the data related to the oil fields.	In what detail must the analytics and machine learning be available. Please give an example.	Analytics and machine learning detail will be limited to the captured parameters and their derivatives.
38	66	Annexure-IV Page 66	Mobile Application The bidder shall provide native mobile application for the following three platforms: 1. Android 2. iOS	Please specify required functionality and third platform.	3rd is windows based mobile applications.
39	66	Annexure-IV Page 66	1. Installation and configuration of software platform on the cloud servers provided by DGH.	Is a software platform like VMWARE ESXi allowed?	Refer Table 2.4.12 on page-68 & 69.
40	67	Annexure-IV Page 67 Page 67	1. Ongoing management of the cloud infrastructure. 2. Having a back egypt for the software database 2. Having a backup strategy for the software database and ongoing implementation of the same. 3. Managing the up gradation of the VMs as per the requirement and the load on the system.	Is it correct that it is the management of all the Virtual Machines (VMs), front end and back end? front end and back end?	The Clause stands deleted.
41		Evaluation Criteria	1. Order of Design, Development,	Please advise whether the web based client – server architecture using	
42	28	// Page 28	Customization, Configuration, Cloud Hosting, Installation and Commissioning of Application Software in Central Server (Cloud Server) for Real Time Data Acquisition, Processing and Handling System. – 05 marks per order/ contract and completion certificate	standard Industry protocols of communication e.g. IEC 60870-5-104 or DNP3, running SCADA application on servers, to achieve specified functionalities will be accepted?	Secure MQTTS protocol, as it is acceptable to all.
43	26			For majority of Global Oil & Gas customers, the Web based client – server architecture for RTU data collection is standard. Please advise whether such project references by vendor will be accepted for pre-qualification.	Refer 2.4 and 2.6 of Annexure-II, page 25 & 26.

44	53	Annexure iii B Special Conditionsof Contract Page 53	ii. Bidder to provide responsibility of data flow from field instruments to FRTU to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s).	We understand that the supply of field instruments and RTUs are not in the scope of this tender. The same will be procured by opertors seperately. DGH will enter in contract with RTMS vendor. The operator(s) are not part of this contract and there is no contractual relationships between RTMS vendor and opertor(s). In case, an operator does not procure / provide the right instruments / RTUs as specified by RTMS contractor, the data collection and RTMS implementation for this asset may not be successful and, as such, RTMS vendor can not be held responsible and the same is beyond the control of RTMS vendor. Hence, we request DGH to remove this clause.	Clause ii) stands revised to "Bidder to provide responsibility of data flow into FRTU and further to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s)". However, in case of dispute, RTMS contractor, to escalate the issue to DGH and provide proof / evidence that he has carried out all his contractual responsibilities / obligations to the satisfaction of DGH and the issue is beyond his control.
45	53	Annexure iii B Special Conditionsof Contract Page 53	iii. Field Remote Terminal Units (FRTU(s)) are to be purchased by the respective field operators. This being the link from the fields to DGH Cloud Server and thus require compatibility. Bidders are to provide the list of compatible FRTU(s) along with their Make, Model and Indicative price, for 24 x 7 seamless communications from Field instruments to RTMS Software in DGH Cloud Server.	We understand that the supply of RTUs are not in the scope of this tender. RTMS vendor needs to mention at least one make, model no and indicative prices in the offer. Please advise whether the same needs to be indicated in Technical bid or price bid.	DGH will impress upon the DSF operators to go for the FRTUs mentioned by RTMS vendor. The prices for FRTUs should be offered in the Price bid and the offered prices should be resonable in line with its list price and previous similar supplies in the industry. The technical brochures for the FRTUs should be submitted along with bid. Bids not having details of FRTUS will be considered in complete. However the prices for FRTU will not be the part of evaluation.

46	53	Annexure iii B Special Conditions of Contract Page 53	iii. Field Remote Terminal Units (FRTU(s)) are to be purchased by the respective field operators. This being the link from the fields to DGH Cloud Server and thus require compatibility. Bidders are to provide the list of compatible FRTU(s) along with their Make, Model and Indicative price, for 24 x 7 seamless communications from Field instruments to RTMS Software in DGH Cloud Server.	We understand that the supply of RTUs are not in the scope of this tender. RTMS vendor needs to mention at least one make, model no and indicative prices in the offer. This indicative price will not be part of price calculations to decide L1. Please confirm.	Yes, Confirmed. The Scope of Supply of FRTU is not part of the tender. However, if DSF Operators approach the RTMS vendor for placement of purchase order / supply of the quoted hardware at the indicated price mentioned by the RTMS vendor in the tender , then RTMS vendor will be responsible for supply of the FRTU and its commissioning.
47		Bid Closing Time / Page 1	Bid Closing Date & Time : 03/01/2018 at 1400 hrs.(IST)	In order to prepare for the most optimised and competitive solution, solution we would need at least 6 weeks from the date of receipt of response of queries. We kindly request DGH to extend the bid submission date by at least for 6 weeks from the date of issue of response of queries.	Bid Closing Date extended to 22.01.2018 at 14:00 Hrs (IST)
48		31, Annexure II	Single point responsibility for data capture & transmission from field instruments to FRTU and from FRTU to Cloud Server RTMS Software. It is required to be dealt during MC meetings or during approval of measurement systems in respective FDP.	Please clarify role and intent of this para	Clause stands deleted
49	65	Scope of Work of Contractor	The bidder shall be responsible for integration and cost associated with any third party services that may be required for the software: 1. Google Maps, Open Street Maps or any other mapping services provider required for Map Views. 2. SMS gateway for any SMS alerts and notifications. 3. Email Service for any email alerts and notifications. 4. IoT Brokers and Application Enablement Platform (AEP) Services e.g. AWS IoT Service 5. Integration with carrier/SIM Management Services	(1) Will cost escalation from 3rd parties be entertained during the course of the project? (2) Will cost escalation from 3rd parties be entertained during AMS?	1) NO 2)NO

50	66	Scope of Work of Contractor	Mobile Application The bidder shall provide native mobile application for the following three platforms: 1. Android 2. iOS	Only 2 mobile platforms are mentioned	pl see query no. 38 (Windows OS)
51	68	68, Scope of Work of Contractor	SLA and Penalties for breakdown of software system The following penalties shall be levied in case of system breakdown 1. In case the system breaks down and software has stopped functioning (i.e. no output available on DGH portal web site marked for the system) the same should be made functional within maximum 12 (twelve) hours of time (for which no separate communication will be made from DGH side) else penalty of Rs. 1500/- every day (number of working days) will be levied on the firm and (number of working days) will be levied on the firm and DGH shall have the right to deduct the same from the running bills of the firm. 2. In case the system generates error messages on website and data is not displayed or wrong data are displayed on web site marked for the system, the same should be corrected within twelve hours time (12 hrs.) (for which separate communication shall be made by DGH for each such incident with error message's snapshots) else penalty of Rs. 1000/- (One hundred rupees only) per error message shall be imposed on per day basis 3. Development of New web pages and configuration of new wells a. Work assigned for new web pages development or configuration of new wells into the software will also attract penalty of Rs. 1000/- per day separately, if not completed in time frame mutually agreed in writing in between DGH and the firm.	There is mention to penalty on Contract Value. The total deduction of LD + SLA penalty amounts to 20% of Contract Value. Is this understanding correct?	Maximum LD is 10% of the total Contract Cost. Hence forth the word "penalty" everywhere in the contract is replaced with "LD" (Liquidated Damages).
52	53	53	Bidder to provide responsibility of data flow from field instruments to FRTU to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s).	RTMS software bidders responsibility should be limited to the availability of the RTMS software, since FRTU's are procured by the DSF-Operators independently and FRTU vendors are responsible for the acquisition of the data from field instruments and ensuring it flows to the RTMS software.	Clause ii) of SCC, Annexure IIIB stands revised to "Bidder to provide responsibility of data flow into FRTU and further to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s)".

53	25	Eligibility and experience of the bidder	The annual turnover of the firm should not be less than Rs. 1.89 Cr in each of the last three years (FY14-15, FY15-16 and FY16-17). Necessary supporting documents such certificate issued by a practicing chartered/ cost accountant certifying the Annual Turnover and audited Balance Sheet and Profit and Loss Account etc should be submitted along with this offer.	CAN BIDDER SUBMIT AUDITED BALANCE SHEET, P&L FOR LAST 3 FINANCIAL YEARS ENDING FY 2015-16. AS FY 2016-17, HAS NOT YET BEEN AUDITED	Yes
54	54	Duration of the Contract	RTMS Software: Within 60 days from the date of issue of Letter of Award (LoA)	There are few requirements which needs the discussions with various stake holders before freezing the functional specifications. We request that DGH to give atleast 6 months for RTMS software completion, from the date of requirements freeze.	The delivery / deployment period of standard RTMS software in DGH servers will be 60 days. However, customisation of software , Field Testing of RTMS solution in all respects should be completed and delivered within 120 days from the date of LOA.
55	54	Payment Terms	<input type="checkbox"/> 90% shall be released on successful installation and commissioning. <input type="checkbox"/> Balance 10% shall be released after successful running of the software for 1Year.	We request the payment terms for the RTMS software as below: 1) Advance - 10% of the implementation price 2) On SRS sign-off - 20% of the implementation price 3) Coding - 30% of the implementation price 4) Acceptance signoff - 30% of the implementation price 5) Balance 10% shall be released after successful running of the software for 1Year.	Please refer the revised Payment Terms attachment.
56	54	Payment Terms	AMC charges for RTMS software from 2nd Year onwards - At the end of each Year	Monthly in Arrears or Quarterly in Arrears	Any AMC payment shall be released on quarterly basis
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Haliburton Queries	TQ-3_DGH_Reply
57	29	Page 29	Please describe the evaluation criteria for "Manpower Strength" as maximum score seems to add up to 30 points instead of the listed 25 points?	Not Agreed, Clarification sought	Max Mark is 20
58	53	Page 53, section ii	Would DGH Cloud Server will be installed in DGH private premises	Not Agreed, Clarification sought	In DGH Premises

59	57	Page 57, section 1.4.2	Is the communication between FRTU and DGH Cloud Server is through the public internet	Not Agreed, Clarification sought	Yes, through secure encryption
60	57	Page 57, section 1.4.5	Is the GMS/GPRS system a public network?	Not Agreed, Clarification sought	Yes
61	57	Page 57, section 1.4.3	What are the other MODBUS equivalent protocols required by the FRTU to gather data from the field instruments? Please provide list as there are many MODBUS equivalent protocols.	Not Agreed, Clarification sought	Not in the scope of this tender.
62	71	Page 71-72	Are the FRTU supposed to communicate and be compatible with all the instruments in this table or only to the ones that use MODBUS protocol?	Not Agreed, Clarification sought	To all the instruments in the table.
63	71	Page 71-72	If required to communicate and be compatible with all the instruments in this table, please provide model in addition to Vendor	Not Agreed, Clarification sought	Refer to Annexure -IIB of Page 53.
64	53	Page 53, item ii and vi	Vendor cannot be responsible for data flow from field instruments (ii) when terms of arrangements with field operators are not defined? Halliburton requests that scope of responsibility be modified to communication from the FRTU upwards.	Not Agreed, Modification suggested	Clause ii) stands revised to "Bidder to provide responsibility of data flow into FRTU and further to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s)". However, in case of dispute, RTMS contractor, to escalate the issue to DGH and provide proof / evidence that he has carried out all his contractual responsibilities / obligations to the satisfaction of DGH and the issue is beyond his control.
65	54	Page 54, item 1.0	Halliburton requests extension of delivery period for RTMS Software from 60 days to 120 days after issue of letter of award	Not Agreed, Modification suggested	The delivery / deployment period of standard RTMS software in DGH servers will be 60 days. However, customisation of software , Field Testing of RTMS solution in all respects should be completed and delivered within 120 days from the date of LOA.
66	55	Page 55, item 7	Please break down the 100 users into administration users, super users, and read only right users?	Not Agreed, Clarification sought	Scope of Work at page 56 is firm, however all user access is considered concurrent.

67	60	Page 60, 2.4.1	Does DGH require the system to support all browsers or one among the four mentioned in the document?	Not Agreed, Clarification sought	All Four.
68	60	Page 60, 2.4.1	Is the "Modeling of Operators" requirement limited to the creation and grouping of operator hierarchies?	Not Agreed, Clarification sought	Yes. Will be decided during the customization
69	61	Page 61, 7	How many report is bidder committed to do from the activity described in the document as "gather the requirements for online MIS reporting from the individual participating divisions and design the solution accordingly?"	Not Agreed, Clarification sought	Refer to reply of Query No.7
70	63	Page 63, 19	How much "history of changes made to a group" is the system required to maintain?	Not Agreed, Clarification sought	Should be available all the time.
71	53	Annexure IIIB	Annexure IIIB states that bidder will be responsible for data flow from field instrument to FRTU to RTMS. Service Level metrics and penalties are then stated based on failure to provide service or recovery from malfunction o Neither the sensors nor the FRTU are going to be under our control as they will be with the operators, how can we be liable for a service level metric on something we do not control? o What happens if field operator and bidder do not reach a reasonable arrangement – as it is assumed in point vi. o Again, item x and xi could only be applied when reason for malfunction is attributed to the equipment and services of the bidder o Is the limitation on penalties (5% of the total amount of contract) for the total duration of the contract, per incident, per month or what?	Not Agreed, Clarification sought	Clause ii) stands revised to "Bidder to provide responsibility of data flow into FRTU and further to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s)". However, in case of dispute, RTMS contractor, to escalate the issue to DGH and provide proof / evidence that he has carried out all his contractual responsibilities / obligations to the satisfaction of DGH and the issue is beyond his control.
72	65	Page 65	Please provide information of the "existing Asset Management System of DGH's ERP"? What API capabilities does it have?	Not Agreed, Clarification sought	It is a capacity requirement of the software which may be needed in future within the contract period
73	65	Page 65, item 54-57	Please confirm that the requirement is only to have the capability and that no specific functionality is part of the required scope of work.	Not Agreed, Clarification sought	It is a capability requirement of the software which may be needed in future within the contract period

74	33	Annexure –III A- General terms and Conditions	<p>Software warranty period is ninety (90) days from the date of delivery. Contractor will repair or replace any defective Software. Contractor does not warrant that the operation of the Software will be uninterrupted or error free. Except as expressly provided above, the Software is deemed accepted AS-IS without any further warranty. These warranties do not cover any defects or resulting damage caused by installation or use of hardware or software not furnished by Contractor, accident (including damage during shipment), neglect, misuse or abuse, or exposure to conditions beyond the environmental, power and/or operating constraints specified by Contractor. Furthermore, these warranties do not cover defects or failure resulting from modification or installation by any person or entity other than Contractor or its authorized representative. DGH accepts full responsibility for any investment made based on results from the Services rendered. Any interpretations or analyses of geophysical or other DGH data, and any recommendation or reservoir description based upon such interpretations or analyses are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional geoscientists may differ. Accordingly, Contractor cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation or reservoir description. As such, any interpretation, recommendation or reservoir description resulting from the Services for the purpose of any drilling, well treatment, production or financial decision will be at the sole risk of DGH. THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. TO THE EXTENT PERMITTED BY LAW, CONTRACTOR SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NONINFRINGEMENT</p>	Not Agreed, Modification suggested	Non-Negotiable.
75		Intellectual Property Rights	<p>DGH acknowledges that CONTRACTOR is the sole and exclusive owner of, or otherwise has the legal right to, the Software and all patents, copyrights, trade secrets, trademarks, and other intellectual properties and proprietary rights therein. No title to or ownership of the Software or the patents, copyrights, trade secrets, trademarks, or other proprietary rights contained therein is transferred to DGH by this CONTRACT. CONTRACTOR grants to DGH a perpetual, nonexclusive, non-transferable license to use the object version of the Software solely for DGH's own internal use during the term of this CONTRACT.</p>	Additional Clause	Not required. DGH and the bidders are to follow the law of the land.
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Jaajitech Queries	TQ-4_DGH_Reply

76		General	General	Does DGH Provide the Travel Arrangements for Vendor Resources to travel to Off-shore fields when necessary during Implementation & Support Period?	If DGH asks for, then the arrangements will be made by DGH.
77				Scope of Supply of FRTUs - Who shall supply, commission establish communication with Sensors?	The Scope of Supply of FRTU is not part of the tender. However, if DSF Operators approach the RTMS vendor for placement of purchase order / supply of the quoted hardware at the indicated price mentioned by the RTMS vendor in the tender , then RTMS vendor will be responsible for supply of the FRTU and its commissioning.
78				In whose scope is the network/Modbus physical connectivity between Sensors & FRTUs?	DSF Operators
79				In whose scope is the network/Modbus physical connectivity between FRTUs & IIOT Gateways?	Refer reply to query No. 44
80				Where the Training Location?	DGH office.
81	59	ANNEXURE IV 2.3.4		What are these devices? FRTUs, Sensors or Gateways?	FRTU - Field Remote Terminal Unit; Sensors are equipment to capture raw signal from the field
82	66	ANNEXURE IV Clause 2.4.5.		What is the third Mobile OS for which is support is required? Further, it is requested to provide the functionalities required in those Mobile Applications.	Windows OS; Mobile apps will include functionalities of the RTMS software.
83	57	ANNEXURE IV Clause 1.4. (4)		Is the MQTT protocol is mandatory? Does DGH consider the use of Secured VPN based communication with end-to-end encryption in both Transport & Message Level?	Yes, MQTTS protocol is mandatory; VPN based communication is not required;
84	60	ANNEXURE IV Clause 2.4.1. (4)		Remote Calibration of Sensors: Does the sensors support such remote Calibration?	> The clause stands deleted.
85				Does DGH provide the Power Supply and Space for the IOT Gateways.	DSF Operator

86	54	Annexure IIIB (xii).		Does the future patches, upgrades to the Software shall be free of cost for life time? What is the tenure for life time?	Software shall be pertual as per terms and conditions of the contract.
87	54			Does DGH require the source code of the RTMS software after the tenure of the contract period?	No
88	53	ANNEXURE- IIIB (iii)		Who are field operators?	The operator of the Blocks/fields.
89	53			Who are DSF Operators?	The operator of the Blocks/fields.
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Apex Automation Queries	TQ-5_DGH_Reply
90	11	Clause no. 14, Bid Security, point no. 2,		We understand that bidder registered under MSMED act is exempted from submission of EM/Bid security. Please refer enclosed our MSMED certificate and request DGH to exempt us from submission of EMD/bid security.	Exemption for submission of EMD allowed as per prevailing Govt. Provisions
91	54	payment terms 3.0, point no. 1,		we request DGH to consider payment terms as " Balance 10% payment shall be released within 30 days after successful running of the software".	Non-Negotiable
92		General		We request DGH to accept 2 individual PBG's : 1st PBG for supply, installation & Commissioning period of RTMS software and 2nd PBG for AMC from 2nd year onward.	Non-Negotiable
93		General		For any delay in providing site readiness permission for installation & commissioning by DGH, bidder shall not be levied LD charges and DGH to extend delivery period for same. Please confirm.	Refer Page No. 54, Item 2.0 Work Order and x. of SCC, Annexure-IIIB, page 53.
94				SIM Cards shall will be in scope of DGH for GPRS communication	In the scope of RTMS contractor

Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Schlumberger Queries	TQ-6_DGH_Reply
95	51	Annexure-III A, Model Contract and General Contract Conditions, Section-33,	Independent Contractor Status	Please clarify if consortium bidding is allowed. If so, please clarify whose references will be considered for qualifying.	Consortium bidding is not allowed.
96	57	Annexure-IV, Scope of Work, Section 1.4	Sensors and devices installed at the oil field are to provide data in digital ModbusRTU/equivalent format on RS485/equivalent. The Field RTU/equivalent will directly poll the connected sensors and devices at regular intervals of 30 min	Please clarify whose scope is supply & installation of FRTU's. Are they existing or needs to be supplied new. If needs to be supplied new, please provide detailed specifications of the same along with approved makes.	Kindly refer to Annexure-IIIB, Special Conditions of the Contract. DGH will impress upon the DSF operators to go for the FRTUs mentioned by RTMS vendor. The prices for FRTUs should be offered in the Price bid and the offered prices should be reasonable in line with its list price and previous similar supplies in the industry. The technical brochures for the FRTUs should be submitted along with bid. Bids not having details of FRTUS will be considered in complete. However the prices for FRTU will not be the part of evaluation.
97	58	Annexure-IV,	Figure-1.4/1.5, Architecture Drawing	<p>Qn-1: Please clarify the color code used for communication between field sensors to RTU's and to the cloud. Please also give the legend for the blocks used.</p> <p>Qn-2: Please also clarify the scope demarcation in the architecture drawing.</p> <p>Qn-3: Please also clarify the cloud architecture (Azure based etc) and let us know data storage capacity required for 5 years with the contracts areas and FRTU stipulated in the tender?</p>	Architecture Description is for only comprehension of the bidders. Any customisation will be finalised with DGH within 60 days of the date of LOA.

98	69	Anexure-IV, Scope of Work, Section-2.4.11, Page 68 / Section-2.5	2.4.11 Exclusions/DGH Deliverables, 2.5 Instruments for RTMS	We understand that the sensors / field instruments are available and are in working condition are not in our scope since quantity is not specified. Please let us know type, make / model and quantity of the existing field sensors / instruments for us to design / deploy suitable FRTU's.	Bidder's understanding is correct. Tentative make of field instruments are provided in this bid.
99	56	Annexure-IV, Scope of Work, S/N-2	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server for contract period of 5 years. Each contract area may have two FRTUs approximately a) Offshore Contract Areas-7 Nos.: 840 FRTU-Months b) Onshore (except NE) Contract Areas-14 Nos.: 1680 FRTU-Months c) North-East-09 Nos.: 1080 FRTU-Months	Bidder understands that quantities mentioned are number of months for which services will be provided from 30 contract areas having two RTUs minimum, e.g. Number of months for Offshore contract area: 7 areasx2 FRTUx60 months=840 months. 1. How many data tags per FRTU are expected? 3. Is there a possibility of increase in FRTU units?	1. Minimum data tag per FRTU may be one and maximum may be any number. 2. There is possibility of both increase and decrease of FRTU units.
100	56	Annexure-IV, Scope of Work, S/N-2	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server for contract period of 5 years. Each contract area may have two FRTUs approximately a) Offshore Contract Areas-7 Nos.: 840 FRTU-Months b) Onshore (except NE) Contract Areas-14 Nos.: 1680 FRTU-Months c) North-East-09 Nos.: 1080 FRTU-Months	Is Bidder responsible for installation of sensors/meters at various Contract Area locations?	May refer to the Special Conditions of the Contract, Annexure-IIIB in page 53.
101	56	Annexure-IV, Scope of Work, S/N-2	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server for contract period of 5 years. Each contract area may have two FRTUs approximately a) Offshore Contract Areas-7 Nos.: 840 FRTU-Months b) Onshore (except NE) Contract Areas-14 Nos.: 1680 FRTU-Months c) North-East-09 Nos.: 1080 FRTU-Months	Is Bidder responsible for installation of data transmission system at various Contract Area locations to connect to DGH Cloud servers?	Communication infrastructure is the responsibility of the DSF operator, where GSM/GPRS/Broadband etc. services are not available. RTMS contractor to arrange for capturing of data from FRTU to RTMS DGH Cloud.

102	56	Annexure-IV, Scope of Work, S/N-4	Services at DGH end to add parameters in the RTMS software, when new wells or fields come into production. (30 contract areas x 4 parameters)	Bidder understands that only 4 additional parameters per contract area need to be added when new wells/fields come into production? Please clarify as this is not clear since there could be several additional data points added per well addition	3 per well and 1 for the sales point is envisaged. However, per contract area, number of parameters may increase depending upon the number of wells & sales points; and as per the requirement of DGH.
103	67	Annexure-IV, Scope of Work, Section 2.4.6.1, Page-67	Delivery period of RTMS software "within 60days from the date of issue of Letter of Award (LoA)"	<p>The the project delivery timeline of Software as a Service (SaaS) is highly dependent on the number of facilities, wells, fields and amount of data that will be integrated into the RTMS software as there will be a need to make multiple customizations, dashboards and reporting system for delivery. Hence, delivery of ready solution within 60 days from the date of issue of LoA is not feasible</p> <p>Bidder proposes the delivery of full solution based on a feasible project timeline mutually agreed between DGH and bidder from the date of issue of Letter of Award (LoA) based on the scope</p>	<p>The delivery / deployment period of standard RTMS software in DGH servers will be 60 days. However, customisation of software , Field Testing of RTMS solution in all respects should be completed and delivered within 120 days from the date of LOA.</p> <p>The term "Software as Service -(SaaS)" anywhere in the tender document stands deleted.</p>
104	70	Annexure-IV, Scope of Work, Section 2.5, Page-70	General Common methods of measurement	Are MPFMs (Multiphase Flow Meters) used for well test considered in the list of methods of measurement?	DSF operator is responsible for field instruments.
105	71	Annexure-IV, Scope of Work, Section 2.5, Page-71	General Common methods of measurement	Is the list of manufacturers/vendors exhaustive or other OEMs for flow meters also considered?	Field instruments are to be installed by DSF operators.
106	58	Annexure-IV, Scope of Work, Section 1.4	Architecture description	Is bidder responsible for providing internet connection at various contract locations?	No. It is limited to the Scope of work only. (page 56)

107	57	Annexure-IV, Scope of Work, Section 1.4, Page-57	The solution should use internet as backbone network for connectivity between the FRTU/equivalent and DGH cloud servers. It should support internet via GPRS and ETHERNET connectivity. The solution design should also have the capability to support SATCOM based communication where GPRS or ETHERNET based internet connectivity is not available	Bidder understands that providing GPRS, ETHERNET, SATCOM systems are not bidder's scope, please clarify 1. If under bidder scope, then how much is minimum bandwidth requirement for each contract area? 2. Will bidder be held liable in case of network outage from internet service provider?	The Bandwidth should be sufficient to capture the data from FRTU; and RTMS software should be capable to capture data and operate in lower bandwidth. However , Bidder may explore by themselves regarding band width availability at site and DGH will assist in communicating with DSF operators.
108	65	Annexure-IV, Scope of Work, Section 2.4.3, Page-65	Third Party Web Services: The bidder shall be responsible for integration and cost associated with any third party services that may be required for the software: 1. Google Maps, Open Street Maps or any other mapping services provider required for Map Views. 2. SMS gateway for any SMS alerts and notifications. 3. Email Service for any email alerts and notifications. 4. IoT Brokers and Application Enablement Platform (AEP) Services e.g. AWS IoT Service 5. Integration with carrier/SIM Management Services	Please clarify if bidder needs to bear the cost of only integration for all the SMS/Email/SIM Management services or integration including product deployment and operational costs of all these service providers for 5 years of contract	To bear all the operational/ service/ rental costs.
109	65	Annexure-IV, Scope of Work, Section 2.4.2, Page-65	Detailed Functional Requirements, Asset Management	What kind of ASSETs are considered for data transmission to existing Asset Management System?	It is a capability requirement of the software which may be needed in future within the contract period
110	66	Annexure-IV, Scope of Work, Section 2.4.2, Page-65	Detailed Functional Requirements, Asset Management	Which Asset Management System is used by DGH presently?	It is a capability requirement of the software which may be needed in future within the contract period
111	69	Annexure-IV, Scope of Work, Section 2.4.6, Page-66	Software Hosting (Cloud Infrastructure)	Which Cloud service provider is currently used by DGH? Is it a Public cloud, Private cloud or Hybrid cloud?	Private

112	69	Annexure-IV, Scope of Work, Section-2.4.12 Page-69	Successful bidder has to provide system training for 03 days to DGH personnel (10 attendees per batch) at DGH office premise, each half-year of the contract period	Bidder understands that training will be delivered to DGH personnel only and not to any DSF operator/Third party	May be third party members, like DSF operators also.
113	57	Annexure-IV, Scope of Work, Page-57	Detailed Scope: Introduction: 1.3. Typical Architecture Overall typical Architecture which DGH envisages is shown in Fig 1.4 below. The Parameters DGH wants to be communicated to the DGH Cloud Server are A. Well Head Pressure, Well Temperature, Fluid Flow rate for non-associated gas well and fluid-flow indication for oil+gas well, from each producing well B. Custody Transfer meters/ Sales Meters and/ or measurement of petroleum produced and saved (in tanks etc.).	What is the highest frequency of input data from SCADA? Is bidder system expected to average the data to daily frequency?	No SCADA. However Architecture Description is only for comprehension of the bidders.
114	57	Annexure-IV, Scope of Work, Page-57	Detailed Scope: Introduction: 1.4.1. Architecture Description This Architecture is based on Internet of Things (IoT) protocols and push technology with local polling and logging to prevent data loss in absence of network connectivity	What is the upper cap of data size for local data polling in case of network outage? Will this vary across FRTUs?	Architecture Description is only for comprehension of the bidders.
115	57	Annexure-IV, Scope of Work, Page-57	Detailed Scope: Introduction: 1.4.3. Architecture Description Sensors and devices installed at the oil field are to provide data in digital Modbus RTU/equivalent format on RS485/equivalent. The Field RTU/equivalent will directly poll the connected sensors and devices at regular intervals of 30 min.	Is the 30 mins transmission rule applicable for all contract areas?	Yes
116	58	Annexure-IV, Scope of Work	Detailed Scope: Introduction: 1.5. Process Flow Diagram	On Annexure-IV, Scope of Work, Page-57 in Detailed Scope: Introduction: 1.4.3. Architecture Description it is mentioned that polling will be done in 30 mins interval while here it is written 10 mins. Kindly clarify.	Architecture Description is only for comprehension of the bidders.
117	59	Annexure-IV, Scope of Work, Page-59	Detailed Scope: Introduction: 2.2.2. Software Provisioning in the DGH Cloud Server Provide support and assistance to DGH (as per the requirement of DGH) round the Clock, 24 x 7 and round the year to integrate the data from the field instruments/RTU/equivalent provided by the respective DSF operators.	Bidder understands that the correction/resolution of any issues arising at contract areas/fields/FRTUs/equipments does not fall under bidder's scope	Refer to the SCC at page 53

118	59	Annexure-IV, Scope of Work, Page-59	Detailed Scope: Introduction: 2.2.2. Software Provisioning in the DGH Cloud Server Provide support and assistance to DGH (as per the requirement of DGH) round the Clock, 24 x 7 and round the year to integrate the data from the field instruments/RTU/equivalent provided by the respective DSF operators.	What will be the expected correction time for any issue related to data capture/transmission from any contract area/field/FRTUs/equipments requiring bidder's staff visit?	No staff visit to site (DSF CA) on account of this contract is envisaged
119	66	Annexure-IV, Scope of Work, Section 2.4.6, Page-66	The bidder shall rectify all the errors/bugs/gaps in the functionality offered by software solution. For performing any functional changes to system, which are deviating from the initial system requirements, a separate Change Control Note (CCN) shall be prepared by bidder and shall be mutually agreed between bidder and the DGH.	Bidder understands that during maintenance period, bidder shall rectify all the errors/bugs/gaps in the functionality offered by software solution. Apart from maintenance, will DGH allocate additional budget/payment for any change request/addition request into the existing system like addition of new algorithms for data analytics?	No
120	67	Annexure-IV, Scope of Work, Section 2.4.6, Page-67	Software Hosting (Cloud Infrastructure) Delivery of other Services as per the SOW shall be made with 72 Hrs or as per the schedule mentioned in the Work-order/ instructions, issued by DGH, time to time.	What are "Other Services", please clarify	It refers to any maintenance services; or services within the scope of work, but of urgent nature.
121	58	Annexure-IV, Scope of Work, Section 2.4.6, Page-58	Figure 1.4	In order to collect the Data from the field, it is needed a system to interrogate the RTU and save the value in a historian system. Is any historian available in all contract location? Does DGH consider a historian in their location?	RTMS Contractor will be responsible as per the SCC, Annexure IIIB, page 53.
122	58	Annexure-IV, Scope of Work, Section 2.4.6	Figure 1.4	Will the sensors data be read by the contractor locally via a scada system?	Beyond this contract.
123	61	Annexure-IV, Scope of Work, Section 2.4.1	Dashboard and Reporting	Will the report be also shared with the local contractor where the sensors are located?	Yes, but the information will be for the specific contract area, that the operator is licensed.

124	65	Annexure-IV, Scope of Work, Section 2.4.2, Page-65	55: Capability to predict well output and production forecasts based on the captured data	What is the time range expected for the production forecast?.. 24 hours? 1 week?.. 1 month?... 3 months?	It may be 5 years or 10 years or 20 years or more.
125	65	Annexure-IV, Scope of Work, Section 2.4.2, Page-65	56: Capability to correlate measured data and predict possible deviation in terms of loss/pilferage / leakage	Is there any other type of infrastructure diferent from wells to be considered?.. Are all the sensor located at well level ?	Yes. Sales point data. No, all sensors are not located at well level.
126	66	Annexure-IV, Scope of Work, Section 2.4.5, Page-66	The bidder shall provide native mobile application for the following three platforms: 1. Android 2. iOS	What are the resolutions of mobile application (mobile phone or tablet ?)	Tablet
127	68	Annexure-IV, Scope of Work, Section 2.4.11, Page-68	IT Hardware for system installation and deployment as per the specifications given below in the Table 2.4.12	For the purpose of backup, can DGH provide storage (like netapps) ?	NO
128	58	Annexure-IV, Scope of Work, Section 2.0	The Scope of Work of the Contractor includes Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the “Real Time Measurement System (RTMS)” software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells. The Cloud servers will be presently located in DGH Data Centre and may be in Disaster Recovery Centre (in future) .	Is bidder responsible for migrating all the data and application licenses to Disaster Recovery Center in future from existing DGH Data Center?	The DRC server will be initially located at DGH only. In Future, it may be shifted to DRC elsewhere in the country.
129	53	Annexure-IIIB, Special Conditions of the Contract, Page 53. Point vi	To ensure smooth and trouble free operation of RTMS from field FRTU onwards, RTMS provider may be required to enter into some sort of arrangement with the respective field operators and DGH will extend cooperation to resolve the issues, if any, wherever required/sought	Will DGH be making any policy for the field operators pertinent to such sort of any arrangements? Isn't this condition vague and prone to delay the delivery/resolution timeline?	Refer to reply of Query No.44

130	54	Annexure-IIIB, Special Conditions of the Contract, Page 54. Point xii	After the Contract period of 5 years is over, the RTMS software shall be handed over to DGH. Subsequent patches, upgradations and the "Right of Use" of the software to DGH shall be extended to perpetuity	After 5 years, DGH will have to purchase the AMC of the software in order to receive the subsequent patches and upgradations. Does DGH expect that the vendor should also provide the AMC price per year along with this contract?	Quote for the AMC as per "Revised Price Format".
131	56	Annexure-IV, Scope of Work, S/N-1, Page-56	Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the "Real Time Measurement System (RTMS)" software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells, as per details given in detailed scope along with maintenance Support Services (Warranty, Patches, upgradations etc.) for 05 years	Qn.1 : DGH will need one more server for the development purpose. Qn. 2: How DGH cloud server will handle the redundancy? What are the fail-safe arrangements in place in DGH cloud environment ?	Refer Clause 2.4.11 of page 68
132	57	Annexure-IV, Scope of Work, S/N-3, Page-57	Onsite (DGH) Operation & Maintenance support services for the RTMS and related communications considering Software as a Service (SAAS) for a period of Five (05) years. At least two persons to be deployed for providing above service on 24x7 basis.	Qn.1 : If DGH wants this in a SAAS model just for 5 years and then what is DGH's expectation from 6th year onwards? Qn.2 : Since DGH has asked for the availability of 2 persons on 24x7 basis, this is the equivalent of having more than 6 resources in total. Are we correct in our understanding that DGH wants more than 6 persons.	1. Beyond this contract. 2. RTMS system should be available on 24 x 7 basis.
133	67	Annexure-IV, Scope of Work, Section 2.4.7	2.4.7 Resources Deliverables 1. One System Engineer has to be deployed at DGH for five days a week in office hours at DGH for the entire project duration	Is this resource requirement different than the one mentioned in Page 56 . Point 3?	Five days a week may be read as 7 days a week for 1 system engineer + support engineer.
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Evinsys Queries	TQ-8_DGH_Reply
140		General		We understand that OEM can bid through their 100% owned subsidiary based out of India. Kindly confirm. In this all documents of parent entity will be used in terms to meet qualification criterion.	Please be guided by Bid Evaluation Clause No. 2.0 for Eligibility and Experience of the bidder.
141		General		The bid needs to be submitted in physical form or through e-bidding. Kindly confirm. Is there any tender purchase fee that needs to be paid?	To be submitted in Physical form. Tender fee is not required
142		General		We would like to request an extension for 15 days due to holiday season towards end of year.	Bid Closing date has been extended to 22.01.2018 at 14:00 Hrs (IST)

143	60	Clause 2.4.1	Item number 4, Calibration: The Web Application should support configuration of manual calibration of sensors	You cannot calibrate unless they are using certain type of sensors (i.e. the sensors? Kindly clarify what does DGH mean by calibration as Most HART)	Sensors not in the scope of this tender.
144	65	On points number 54,55,56,58	Requirement: Analytics and Machine Learning	kindly advise if you have certain expectations or technical criterion here or these are in general expectations.	> Software should have capability for analytics and machine learning > Feature may be utilised after sufficient data is available
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Atos Queries	TQ-9_DGH_Reply
145	34	1.6	Shall mean order/ contract placed by the CONTRACTOR for any portion of the CONTRACT or work sublet with necessary written consent of DGH on third party. Such sub-letting shall not relieve the CONTRACTOR from any of its obligation, duty or responsibility under the CONTRACT.	Bidder requests to kindly clarify if naming the Sub-Contractor in the proposal would be considered as necessary written consent from DGH on third party.	Not required during proposal stage
146	51		<p>Notwithstanding any other provisions, except only in cases of willful misconduct and / or criminal acts,</p> <p>a) Neither the Contractor nor DGH shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided however that this exclusion shall not apply to any obligation of the Contractor to pay Liquidated Damages to the DGH and</p> <p>b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under the Contract, in tort or otherwise, shall not exceed Contract Price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the DGH with respect to Intellectual Property Rights.</p> <p>c) DGH shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.</p>	<p>Bidder request DGH to modify 34 (b) as follows:</p> <p>b) Notwithstanding any other provisions incorporated elsewhere in the contract, the overall aggregate liability of the Contractor in respect of this contract, whether under the Contract, in tort or otherwise, shall not exceed Contract Price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the DGH with respect to Intellectual Property Rights.</p>	No Change
		34			

147	46	21.4	If the DGH considers that the performance of the CONTRACTOR is unsatisfactory or, not up to the expected standard, the DGH shall notify the CONTRACTOR in writing and specify in detail the cause of such dissatisfaction. The DGH shall have the option to terminate this Agreement by giving 14 days notice in writing to the CONTRACTOR, if, CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the DGH.	Bidder requests deletion of this clause.	If the DGH considers that the performance of the CONTRACTOR is unsatisfactory or, not up to the expected standard, the DGH shall notify the CONTRACTOR in writing and specify in detail the cause of such dissatisfaction. The DGH shall have the option to terminate this Agreement by giving 30 days notice in writing to the CONTRACTOR, if, CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the DGH.
Sr. No.	Page No	Clause No.	Clause Detail / Tender requirement	Logicladder Queries	TQ-10_DGH_Reply
148	53	Page 53/88 Clause ii	Bidder to provide responsibility of data flow from field instruments to FRTU to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s).	Does this mean that the bidder is responsible for providing the network connectivity to the FRTUs through SIM card or satellite communication as may be required by the contract area ?	Yes. However, communication infrastructure is the responsibility of the DSF operator.
149	53	Page 53/88 Clause ii	Bidder to provide responsibility of data flow from field instruments to FRTU to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s).	Do we have to budget for the satellite communication for each of the location as these contract areas are very remote and will necessarily require satellite communication?	Rental and Monthly charges has to be budgeted. Infrastructure and support cost of any satellite/ other communication has to be borne by the DSF operators. Also refer to reply of Query 44.
150	53	Page 53/88 Clause iii	Bidders are to provide the list of compatible FRTU(s) along with their Make, Model and Indicative price, for 24 x 7 seamless communications from Field instruments to RTMS Software in DGH Cloud Server.	No specifications have been provided. There should be specifications that should be released by DGH regarding the FRTU. Else there will be no way to compare the various makes and models that are provided by the bidder	FRTUs details are part of the technical bid and pricing are of Commercial bid. However, FRTU prices will not be used for bid evaluation.
151	53	Page 53/88 Clause 2.0	Work Order: Subsequent to Letter of Award to successful bidder and completion of job against item sl no 1, separate work order for job against item sl no 3, 5, 6 & 7 shall be issued by authorised DGH official on as and when required basis during the contract period.	Will the initial work order has item 1 only or Item 1, 2 and 4? The initial work order should have Item 1,2 & 4 as these are not related to the number of FRTUs deployed.	The contract basis, wherein Price Format has been structured for facilitating payment in defined manner. Line item 1 is lumpsum quote and other line items are on rate contract basis.
152	54	Page 54/88 Clause 3.0 Point 2	AMC charges for item-1 from 2nd Year onwards.	Please change the payment terms to quarterly at the end of each quarter. The AMC charges should be payable quarterly at the end of each quarter.	On Quarterly Basis

153	56	Page 56/88 Point 4	At least two persons to be deployed for providing above service on 24x7 basis.	Please clarify if these two people are to be deployed onsite at DGH premises for the full duration of the project ?	For the entire contract period.
	56	Page 56/88 Point 4	At least two persons to be deployed for providing above service on 24x7 basis.	Will there be night shifts as well ? This should be during the business hours from 0900 hrs to 0600 hrs IST	RTMS System should be available 24 x 7 basis.
155	56	Page 56/88 Point 4	At least two persons to be deployed for providing above service on 24x7 basis.	Will DGH office space will provided to engineer for 24*7*365 to provide support?	Refer Clause 2.4.11 of page 68
156	56	Page 56/88 Point 4	After completin of each quarter, on certificate of performance	The payment terms should be monthly on this as deployed resurces are involved. This should be invoiced monthly and payable before the 7th of the following month	On Quarterly Basis
157	56	Page 56/88 Point 4	After completin of each quarter, on certificate of performance	What is certificate of performance and who will certfy the performace? What is the process for this ?	Appointed authority of DGH will certify.
158	67	Page 67/88 Clause 2.4.7 Point 2	One Support Engineer for co-ordination between the DGH and operators for the integration of their data to the DGH cloud.	What type of coordination with operator? DGH should make role and responsibility of both the engineering resurces more clear. Do they need to travel to operator site? If yes who will bear travel cost?	They are required to make the RTMS system available and operational 24 x 7. Refer to reply of Query no.76.
159	67	Page 67/88 Clause 2.4.9	2.4.9 Replacement of Resources In case of the non-availability of the initial approved resources, the resources are not available due to any of the following specified reasons, the above manpower shall be replaced within a period of three working days. 1. if the person leaves the	Practically replacement of manpower within three working days is not possible. It is requested to amend this to 2 weeks.Should be within 2 weeks of DGH notice to bidder.	Non-negotiable
160	68	Page 68/88 Clause 2.4.10 Point 2	In case the system generates error messages on website and data is not displayed or wrong data are displayed on web site marked for the system, the same should be corrected within twelve hours time (12 hrs.) (for which separate communication shall be made by DGH for each such incident with error message's snapshots) else penalty of Rs.1000/- (One hundred rupees only) per error message shall be imposed on per day basis	What if sensor is providing incorrect data or no data? Should be written as bidder should attend to the problem within 12 hours of problem identified. Weekends, Public Holidays should be exempted.	Non-negotiable. The RTMS system should be available for 24 by 7.

161	68	Page 68/88 Clause 2.4.10	2.4.10 SLA and Penalties for breakdown of software system	Since there is a penalty being imposed based on downtime, is it required for the bidder to maintain a online ticketing system where the DGH/ operators can put their problem and issues as tickets to be resolved by the bidder ? This is required to maintain and track SLAs else there will be no mechanism to track the incidences of breakdown	Suggestion noted. Bidders are to provide this in the RTMS Software.
162	66	Page 66/88 Clause 2.4.5	2.4.5 Mobile Application The bidder shall provide native mobile application for the following three platforms: 1. Android 2. ios	The word "three" should be replaced by "two". Windows Mobile Platform is not required as less than 1% of the devices use windows OS for mobiles	windows OS for mobiles
163	62	Clause 2.4.2	2.4.2 Detailed Functional Requirements	Do we have to provide a compliance statement for the functional specifications mentioned in this section against each point ?	Refer Bid Submission Performa, page 16.
164	65	Page 65/88 Clause 2.4.2 Point 24	24 User should be able to create custom dashboard for himself.	Should these custom dashboards be drag and drop enabled for the ease of the user ?	Should be user friendly
165	65	Page 65/88 Clause 2.4.2 Point 57	57 Capability to add more data algorithms as required from time to time.	Does this mean that we will have to budget for additional development effort once the project has been delivered ?	It is a capability requirement of the software which may be needed in future within the contract period
166	66	Page 66/88 Clause 2.4.6 Point 7	7. The bidder would place one resident engineer onsite for a minimum of 1 month for testing after completion of configuration of the supplied items.	Is this a testing engineer apart from the 2 resources that are to be supplied ?	Yes
167	67		EMD	M/S Logicladder Technologies Private Limited is a MSME registered company due to which we are requesting for exemption to Bid Bond in tender submission. We request you to give us exemption for Bid Bond in this tender RFP.	Exemption for submission of EMD allowed as per prevailing Govt. Provisions

Subject: Additional Amendments other than mentioned in Pre-bid Queries		
Page No	Clause	Amendment
31	1. List of all the likely post contract issues and the provisions in the tender document to deal with the same.	This clause stands deleted
	a) Support of DSF-operators to RTMS Vendor	
	DGH gets involved in facilitating RTMS Vendor to enter into arrangements with DSF-operators for successful capture of field data and their transmission to RTMS of DGH-Cloud Server.	
56	Scope of Work Annexure-IV	Scope of Work Annexure-IV
	S/N 6. Estimated User Authorisations (20 Concurrent Users)	S/N 6. Estimated User Authorisations (100 Concurrent Users)
67	2.4.7 Resources Deliverables	2.4.7 Resources Deliverables
	1. One System Engineer has to be deployed at DGH for five days a week in office hours at DGH for the entire project duration.	1. One System Engineer has to be deployed at DGH for seven days a week at DGH for the entire project duration.
	a. B. Tech. or engineering degree in any stream with at least five years of IT experience in the software development and system administration in the relevant discipline in which software package is provided.	a. B. Tech. or engineering degree in any stream with at least three years of IT experience in the software development and system administration in the relevant discipline in which software package is provided.

Note: Highlighted text in last column in DGH replies include modifications/amendments in the Tender/Bid document. Bidders are requested to take note of these amendments along with two more attachments concurrently published on website for Revised Price Format and Revised Payment Terms. Bidders are advised to take a print out of these three attachments and submit them along with Tender/Bid document after duly signing and stamping. This is mandatory for ensuring compliance to the revised set of instructions.