

NAME OF TENDER:

SUPPLY, DELIVERY,
INSTALLATION, TESTING &
COMMISSIONING OF WIRELESS
AUTOMATION OF DISPENSING
UNITS AND ATG AT 100 NOS
PETROL STATIONS OF LANKA
IOC PLC

Tender No :	LIOC/ ENG/ GT/ 03/ 2018-19
Due Date &Time :	12.02.2019 @ 10:00 Hrs

**TECHNICAL/ COMMERCIAL &
PRICE BID**

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	TITLE: SUPPLY, DELIVERY, INSTALLATION, TESTING & COMMISSIONING OF WIRELESS AUTOMATION OF DISPENSING UNITS AND ATG AT 100 NOS PETROL STATIONS OF LANKA IOC PLC	

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PART-II

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Tender No: LIOC/ ENG/ GT/ 03/ 2018-19

Dt: 08.01.2019

M/s.

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.....
.....

Dear Sir,

SUB: SUPPLY & INSTALLATION OF WIRELESS AUTOMATION SYSTEM FOR DISPENSING UNITS AND ATG AT 100 NOS PETROL SHEDS OF LANKA IOC PLC

DUE DATE & TIME: 12.02.2019 @ 10.00 HRS

Lanka IOC Plc is a private limited company in Downstream Petroluem in Sri Lanka and also a subsidiary of Indian Oil Corporation Limited. As part of our assets, we operate more than 200 retail outlets across the Island. We plan to provide wireless automation system for Dispensing Units & Product Tanks at its 100 ROs including comprehensive AMC and for which the subject tender enquiry is being made and as described in further detail in the tender documents.

1. Following documents forming a part of the mentioned tender are enclosed in single set:

S/N	DESCRIPTION
PART I: TECHNICAL/ COMMERCIAL BID	
1	Notice Inviting Tender
2	Special Terms & Conditions of Tender
3	Technical specification and Drawing etc.
4	Pre-qualification criteria and documents to be enclosed
5	Declaration of the Bidder
6	Bidder's Information
7	Details of statutory levies & currencies for Sri Lankan Bidders/ Foreign Bidders.
8	Proforma of Declarations to be Furnished by the Tenderers
9	Proforma of Performance Guarantee
10	Proforma of Authorization of Agents / Dealer
11	Proforma of declaration of genuineness of documents
PART II: PRICE BID	
1	Schedule of works /Price bid

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2. We request you to submit your lowest quotation for the work contained in the tender. Your offer complete in all respects must be submitted so as to reach this office of LIOC on or before **12/ 02/ 2019 at 10:00 hrs.** Offer may please be dropped in Engineering tender box kept in our office at address given below.

**SENIOR VICE PRESIDENT (ENGG),
LANKA LIOC PLC,
LEVEL 20, WEST TOWER, WORLD TRADE CENTRE,
ECHELON SQUARE, COLOMBO - 01,
SRI LANKA.**

3. Tender Fee: Tender documents (non transferable) can be obtained from Engineering department, Lanka IOC PLC, 20th floor, West Tower, Echelon Square, Colombo, Sri Lanka by way of a request letter together with tender fee for **LKR 5,000.00** by way of Demand Draft drawn in favour of LANKA IOC PLC payable at COLOMBO or **USD 32/ Euro 27** as the case maybe.
- 3.1. LIOC shall not be responsible for any Postal / Courier delays if document is sought by post. The tender documents can also be downloaded from our web site **www.lankaio.com** during the sale period. In such case, the tenderers must ensure that all the documents are downloaded and the responsibility of the same shall vest with the individual tenderer. Before downloading the tender documents from the website, the tenderer should register in the website by giving the correct name of the firm, address and all details as required. It shall be the responsibility of the tenderer to ensure that they register with the web site well in advance and download the documents before due date and time of close of sale. In case, the name and address in which the tenderers have registered at the website does not match with the name and address of in which they have quoted, their tender shall be rejected outright.
- 3.2. The tender documents downloaded are not transferable and can be used only by the registered tenderer who has downloaded the documents. Hence any tender submitted by the tenderers who have neither bought the tender nor downloaded the same shall be rejected outright. **In case, the tenders are downloaded, the tenderers are NOT required to submit the Tender Fee for LKR 5,000/- (USD 32/ Euro 27) along with the Technical Bid documents.**
4. Submission of Tender Documents:
- 4.1. Tender Envelope must be super scribed duly indicating the tender number, due date and time of opening, name of work tendered, address of tenderer. It must be noted that the Technical bid (named as COVER A) & Price bid (named as COVER B) shall be enclosed in separate covers and sealed. The two covers (COVER A & COVER B) in

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sealed condition containing the above must be enclosed in an outer cover (named COVER C) and sealed and submitted. The outer cover (COVER C) must be super scribed duly indicating the tender number, due date and time of opening, name of work tendered, name and address of tenderer. Non-submission of the tender documents in the manner prescribed above will render the offer liable for rejection.

4.2. Tenderers to note that LIOC shall not be responsible for the postal delays in dispatch and receipt of tender documents. Tenderers must also note that all pages of tender must be signed with stamp and submitted as part of submission of tender.

4.3. Tenders received after the due date and time shall be rejected outright.

Thanking You,

**Yours Faithfully,
For LANKA IOC PLC.,**

FOR SENIOR VICE PRESIDENT (ENGG)

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NOTICE INVITING TENDER (PRESS NOTICE)



Lanka IOC

Lanka IOC PLC

NOTICE INVITING TENDER

Tender no: LIOC/ ENG/ GT/ 03/ 2018- 19

Lanka IOC PLC invites global tender in prescribed tender form under two bid system from bonafide contractors/ suppliers for the following works:

NAME OF WORK	SALE / DOWNLOAD PERIOD (BOTH DAYS INCLUSIVE)	CONTACT PERSON
SUPPLY, DELIVERY, INSTALLATION, TESTING & COMMISSIONING OF WIRELESS AUTOMATION SYSTEM FOR DISPENSING UNITS / PRODUCT TANKS AT 100 NOS PETROL STATIONS OF LANKA IOC PLC.	08 Jan'2019 From 0900 Hrs To 11 Feb'2019 Up to 1700 Hrs	SVP (ENGG) TEL: +94 11 2475720 Email: elamarantk@lankaiooc.com
Please visit our website www.lankaiooc.com for further details on this tender.		

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INTRODUCTION

1	Name of Work	:	Supply, Delivery, Installation, Testing & Commissioning of wireless automation of dispensing units and Product Tanks at 100 Nos Petrol Stations of Lanka IOC PLC
2	Place of Work	:	100Nos of Lanka IOC Plc Petrol Stations across the Island
3	Tender Ref	:	LIOC/ ENG/ GT/ 03/ 2018-19
4	Tender Due Date & Time	:	12/ 02/ 2019 @ 10:00 HRS
5	Tender Cost	:	LKR 5,000/- (USD 32/- OR Euro 27/-)BY DEMAND DRAFT ONLY
6	Bid Bond	:	LKR 2,920,000/- by DD/ BG (USD 16,300/-OR Euro 14,400/-) By way of TT Transfer
7	Contract Period	:	06 (SIX) MONTHS
8	Validity of Tender	:	04 (FOUR) Months from date of tender opening (Technical Bid)
9	Pre Bid Meeting	:	29/ 01/ 2019 @ 11:00 HRS
10	Verification of original documents	:	13/ 02/ 2019 & 14/02/ 2019
11	Tender Submission	:	Sr. VICE PRESEDENT (ENGG), LANKA IOC PLC, LEVEL 20, WEST TOWER, WORLD TRADE CENTRE, ECHELON SQUARE, COLOMBO - 01, SRI LANKA
12	Contact Person	:	RANKETH WIJEYARATNE, MANAGER (ENGG) TEL: +94 011 2475712 FAX: +94 011 2391490 OR 247578 EMAIL: ranketh@lankaio.com

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IMPORTANT GUIDELINES TO TENDERERS FOR FILLING TENDER DOCUMENTS:

1. **Tenders** under single stage two-part system (Part I: Techno-Commercial Bid and Part II: Price Bid) are invited from reliable, bonafide & experienced Manufacturers or their authorized agent /authorized importer/authorized distributor/authorized dealer for “Supply, Delivery, Installation, Testing & Commissioning of wireless automation of dispensing units/product tanks at 100 nos Petrol Stations of Lanka IOC PLC
2. The tender should be submitted only in the prescribed tender schedule form supplied by Lanka LIOC, Colombo or down loaded from the web site www.lankaio.com
3. Please submit Technical/ Commercial bids & price bid in separate sealed envelopes. The two envelopes shall then be submitted in outer cover. All the envelopes (Technical bid, Price bid and Outer cover) must be clearly super scribed with tender no, subject, name & address of tenderer, due date and time.
4. Non-submission of all documents or incomplete submission of any document may result in rejection of the tenderer. It is, therefore necessary to submit all the documents duly filled and signed.
5. The price bid should consist of only rate schedule and no other documents.
6. Please note that unsuccessful tenderers will be intimated after the finalization of tender. No correspondence shall be entertained in this regard.

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NOTICE INVITING TENDER:

a.	Name of Work	Supply, Delivery, Installation, Testing & Commissioning of wireless automation of dispensing units and Product Tanks at 100 Nos Petrol Stations of Lanka IOC PLC
b.	Location of Work	100 Nos Petrol Stations across the Island
c.	MODE OF TENDER	Global Tender (Part I - Techno-Commercial Bid and Part II - Price Bid)
d.	Tender No.	LIOC/ENG/GT/02/2018-1
e.	Commencement of Sale of Tender / Downloading of Tender	08 th Jan' 2019 @ 0900 hrs
f.	Closure of Sale of Tender / Downloading of Tender	11 th Feb' 2019 @ 1700 hrs
g.	Tender Fee	LKR 5,000 (non refundable/ non transferable) in the form of Demand Draft drawn in favor of Lanka IOC PLC and payable at Colombo or USD 32/ Euro 27 as the case maybe. Please note that: there is no tender fee in case of Bidder downloading the Bid Documents from Lanka IOC Website i.e. www.lankaio.com . Please ensure that you have got yourselves registered in the name in which the Bid is intended to be submitted.
h.	Pre -Bid Meeting	29 th Jan' 2019 @ 11.00 hrs at Level 20, West Tower, World Trade Centre, Echelon Squire, Colombo 01, Sri Lanka
i.	Due Date and Time for Submission of Tender	12 th Feb' 2019 @ 1000 hrs. The intending bidders are required to submit their offer in the Tender Box at the following address before the due date and time: SVP (Engineering) Lanka IOC PLC Level 20, West Tower, World Trade Center, Echelon Square, Colombo 01, Sri Lanka
j.	Due Date & time of opening of Part-I(i.e. Techno-Commercial Bid)	12 th Feb' 2019 @ 1030 hrs.
k.	Date of opening of Part II i.e. Price bid	Shall be informed separately
l.	Verification of Bid Documents (with their original copies)	13 th Feb' & 14 th Feb' 2019 (after Tender Opening and during working hours)
m.	Work Completion Time	02(TWO) Months for Supply and 04(FOUR) Months for Installation from the date of issuing of LOI (Letter of Intention) followed by 1 years warrantee and further 2 years comprehensive AMC

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n.	Bid Bond/ Earnest Money Deposit	For Local (Sri Lanka) Bidders: The bidders are required to deposit Bid Bond/ Earnest Money of LKR 2,920,000/- along with the Technical Bid by way of Demand Draft/ Banker's Cheque in favour of Lanka IOC PLC and payable at Colombo. Please note that Bid Bond must not be enclosed with the envelope containing Price Bid. Bids received without proper instrument of Bid Bond/ Earnest Money or in a manner different as above may render the tender liable for rejection. For Foreign Bidder: The bidders are required to deposit EMD/Bid Security of USD 16,300 /Euro 14,400 By way of TT Transfer in favour of Lanka IOC PLC directly into the designated bank mentioned as below and enclose a copy of the Swift transfer Message. Lanka IOC PLC FCBU account no. 25273008920219 held with State Bank of India, Colombo (SWIFT CODE:- SBINLKXFCB) through their account no.000146528 with HSBC, USA, New York(SWIFT CODE: MRMDUS33). Alternatively, Demand Draft drawn on Lanka IOC PLC payable at Colombo can be submitted along with the Technical Bid.
	Note:	
I.	Part I Techno-Commercial bid will be opened on specified date and time as given in the NIT. Bidder(s) can witness opening of bid at the venue as mentioned. Part II Price bid will be opened of only those bidder(s) whose Part I Techno-Commercial Bid is found to be Techno-Commercially acceptable by LANKA IOC PLC. Such bidder(s) will be intimated date of opening of Part II Price bid, through valid email. The email shall be as used by them for registering themselves at Lanka IOC website at the time of downloading the Tender or as mentioned by them in the "Bidder's Information" in the tender document.	
II.	Corrigenda / addenda / clarifications, if any, shall be hosted on the above mentioned website only. No separate advertisement will be made in the print media. Tenderer should visit the website frequently to check for updates.	
III.	The documents uploaded by bidder(s) will be scrutinized. In case any of the information furnished by the bidder is found to be false during scrutiny, Bid Bond/ EMD of defaulting bidder(s) will be forfeited. Punitive action including suspension and banning of business/ Holiday listing can also be taken against defaulting bidders.	

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Procedure for Selection of Contractor

- A. Submission of Bid Documents:** Offer shall be considered for evaluation only in respect of Bidders who have submitted the tender within the due date and time and with the requisite Bid Bond/ EMD. All details as required in the “Statement of Credentials/ Bidder’s Information” shall necessarily be filled up and copies of documents in support of meeting the pre qualification criteria be submitted failing which the Bid may be summarily rejected.
- B. Verification of Documents:** The backup documents submitted in support of the credentials and the pre qualification criterion shall be verified with their original copies and which have to be brought to this office by the respective Bidders on the dates mentioned for “Verification of Original Documents”. Refusal to furnish the original documents for verification may render the bid liable for rejection.
- C. Technical Qualification:** Tenderer will be considered as technically qualified based on meeting qualifying parameters and after verification of original documents towards the same as stipulated above. Decision of Lanka IOC on the same shall be final and binding. In the event, document submitted by the tenderer is found to be forged or incorrect, such tenderer shall be rejected and bid bond submitted shall be forfeited immediately. Such tenderer is also liable to be put on Holiday List by IOC.

PQ criteria has been framed as below

- I. Average Annual Financial Turnover during the last 3 FY ie 2015-16, 2016-17 and 2017-18 shall be at least **LKR 87.6 Mil (USD 488,922)** (30% of estimated value). In case of non-submission of balance sheet for any particular FY, the same shall be considered as ZERO for computation of avg. Turn Over. The balance sheet shall be audited by a Chartered Accountant wherever required as per the rule of the Land.
- II. Similar Works: Should have successfully completed ‘Similar Works’ during the last 5 years ending **31/ 12/ 2018** as per following.
 - Single work order not less than **LKR 233.6 Mil (USD 1,303,790/-)** (80% of estimate) OR
 - Two work orders not less than **LKR 146.0 Mil (USD 814,869/-)** (50% of estimate) OR
 - Three work orders not less than **LKR 116.8 Mil (USD 651,895/-)** (40% of estimate)

Definition of similar works:

- Bidder shall be a manufacturer of DU Automation Equipments or their authorized agent / authorized importer/ authorized distributor/ authorized dealer.
- Bidder should have supplied and installed all the tendered items to any authority/Gas or Fuel stations/refinery/Petroleum Terminal or any other user

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III. Availability of Business Registration and VAT /GST or other relevant registration certificates.

IV. Vendor should have a company registered in Sri Lanka or should have direct/indirect subsidiary company registered in Sri Lanka for the after sales services. In case, if above company registration is not available, vendor shall submit an undertaking stating that, same will be submitted within 35 days from the date of placing of LOI (Letter of Intent). Failing which; EMD will be forfeited.

D. Price Bid Opening & Finalization of Contract: Tenderers are required to quote fixed amount in the Price Schedule. Price Bid of only technically qualified parties shall be opened, after intimation to successful tenderers. Status of tenderers shall be arrived at based on the price quoted by individual tenderers and arranged from lowest bidder to highest bidder in terms of quotation. In case of identical rates received, parties having higher annual average turnover in the last 3 financial years i.e. as worked out for qualifying criteria shall get precedence. Turn over if not provided for any year shall be considered as zero for the purpose of calculating the average.

The lowest acceptable rate with or without negotiation & accepted by Lanka IOC shall be considered for award of work.

E. Number of Parties/ Contractors/ Vendors: Maximum of 1 Contractor/ Vendor shall be selected for automation of all 100 Petrol Sheds.

The Tenderers are advised to submit their offer strictly adhering to the terms and conditions and specifications contained in the Tender document and not to stipulate any deviations. Failure to do so will result in rejection of the Tender outright notwithstanding their status on quoted rates.

Canvassing of information or submission of forged or false documents / information by any Tenderer shall make their offer invalid. In addition, action shall also be taken by Lanka IOC PLC for forfeiture of bid bond as well as putting the Tenderer on Holiday list.

The successful tenderer will have to execute an agreement with LIOC PLC, covering all aspects to the contract, in the form prescribed, immediately before commencement of work. Intending tenders should acquaint themselves with provision of the agreement before sending the tenders.

Tenders should reach ENGINEERING DEPARTMENT, LANKA LIOC PLC, LEVEL 20, WEST TOWER, WORLD TRADE CENTRE, ECHELON SQUARE, COLOMBO - 01, SRI LANKA before due date and time mentioned above.

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List of Annexure:

Special Terms & Conditions of Tender	:	Annexure -I
Technical specification (if any)	:	Annexure - II
Pre-qualification Documents to be enclosed	:	Annexure-III
Declaration of the Bidder	:	Annexure-IV
Bidder's Information	:	Annexure-V
Details of statutory levies for Sri Lankan Bidders & local agents of foreign bidders.	:	Annexure-VI
Details of currency for foreign bidders.	:	Annexure- VII
Proforma of Declarations to be Furnished by the Tenderers including List of Directors of Lanka IOC PLC	:	Annexure- VIII
Proforma of Performance Guarantee	:	Annexure-IX
Proforma of Authorization of Agents / Dealer	:	Annexure-X
Proforma of declaration of genuineness of documents	:	Annexure-XI
Check list for Site acceptance test for retail outlet automation system:	:	Annexure-XII
Schedule of work /Price Bid	:	Annexure-XIII

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Annexure -I

SPECIAL TERMS & CONDITIONS OF TENDER:

Sl. No.	Terms	Response
1.	Mere issue of Tender Document will not mean that a particular bidder will be automatically considered qualified and their bids will be entertained. Such qualification will be reviewed at the time of evaluation of bids also. Bid shall have to be submitted in English language only and in metric system.	AGREE
2.	Price Bids (Part-II) of only those eligible bidders whose Part-I Bids are complete and in order shall be opened on time and date to be intimated later separately.	AGREE
3.	Bid Submission for	
3.1	a. Supply, Delivery, of wireless automation system (Hardware & software) for Dispensing units at 100 Nos petrol stations(Retail Outlets) of Lanka IOC PLC (Part A)	AGREE
3.2	b. Installation, Testing & Commissioning of wireless automation system (Hardware & software) for all Dispensing units at 100 Nos petrol stations(Retail Outlets) of Lanka IOC PLC (Part B)	AGREE
3.3	c. Comprehensive AMC for 2 years (Part C)	AGREE
4.	SCOPE OF WORK FOR PART A:	
4.1	The work includes Supply, Delivery, Installation, Testing and Commissioning of items mentioned in Tendered BOQ in detail along with all necessary accessories following all standard guidelines and specifications in this regards. Wireless automation system of Dispensing Units at each RO shall be undergone (SAT) Site Acceptance Test and commissioned to the complete satisfaction of SVP (E)/ Lanka IOC or his authorized representative before handing over.	AGREE
4.2	NAME OF EQUIPMENT / ITEMS: i. Forecourt Controller (FCC) per RO ii. FCC Wireless Master per RO iii. FCC Wireless Slaves per DU iv. Monitor, Key Board & Mouse per RO v. Accessories including network switch & router etc. per RO vi. Surge Protection Device per RO vii. Handheld POS Terminal (Hardware) per DU viii. Automation Software License per RO ix. POS terminal Software License per DU x. HQ System (HOS System including hosting of cloud sever & displaying of dashboard at LIOC HQ)	AGREE

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	xi. Wireless ATG Probe per Tank xii. Wireless ATG Receiver per RO xiii. Customer registration model or terminal per RO. as per nos. and specifications as detailed elsewhere in this Bid document.	
4.3	The bidders are not required to visit the sites (Proposed Petrol Stations/ Retail Outlets) to ascertain the required quantity/ length and number of each accessory required for wireless automation of DUs. An approximate number of 600 DUs (i.e. Tokhiem 350 DUs + GRV 120 DUs + MIDCO 130 DUs) which may vary +/- 10% with average 6 Nos of Dispensing units per RO and maximum of 6 Nos of Product Tanks per RO have been considered in the Price Bid as a directional figure. However it is the sole responsibility of the successful bidder to ensure the complete functionality of the wireless automation system of Dispensing Units and Tanks at respective ROs in all respects without any additional cost in case of requirement of additional equipments / accessories / automation related all hardware & software with reference to the above tentative quantities of Dispensing Units at respective 100 ROs. (Payment shall be made in measure & pay basis for above items in clause 4.3)	AGREE
4.4	The tenderer should furnish all technical specs including make/ model, weight, size, compatibility etc. and any other details for the safe use, storage and stowage of the equipment, its spares, accessories and consumables as detailed in the Technical Specifications. Equipment and materials shall be guaranteed for one (1) years from the date of satisfactory commissioning against any manufacturing defect / poor performance and in case of such defect/poor performance during guarantee period, the same shall be replaced/ rectified by the supplier at free of cost.	AGREE
5.	SCOPE OF WORK FOR PART B:	
5.1	Installation, Testing & Commissioning of wireless automation system for Dispensing Units and Product Tanks at 100 Nos petrol stations(Retail Outlets) of Lanka IOC PLC.	AGREE
5.2	The scope of vendor also includes following functional requirements: • The server shall be installed at Lanka IOC/ HO (or other suitable designated place or cloud based server located in Sri Lanka) • Installation of wireless devices in the DU, Tanks, FCC, computer etc. • Mapping of sale transaction i.e. product / nozzle / quantity / amount • Receipts with transaction details including the vehicle registration no. • Hand held RFID reader to also to be compatible and technologically ready for swiping electronic cards/ fleet cards (with payment solution available with at least payment gateway for 1 Bank). The vendor shall make available all required software/ hardware necessary for hand shake with other payment	AGREE

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	gateways at no extra cost to Lanka IOC. • System to be compatible for tank gauging automation (either wired or wireless) as required. • DU transaction (and Tank Gauging) data on real time to be pushed to the server (to be installed at LIOC/HO/Cloud based) so that customized reports can be sent to the customer via SMS/ Mail (cost for internet/ telecom service provider not in the vendor's scope of works.) • Nozzle wise transaction summary available including totaliser reading for easy reconciliation. • Server to host necessary software for capturing of data and generation of reports as per the requirements of LIOC. • The vendor shall make available all required software/ hardware necessary for displaying of dashboard at LIOC HQ for breakdown monitoring purposes.	
5.3	The scope of work also includes providing training to respective Dealers / Field Officers and Pump attendants in each ROs without any additional cost to Lanka IOC. (I.e. Post implementation, the vendor shall impart training to Lanka IOC team including IS for maintenance of the system. IS dept. would also be involved for other value additions including sending of SMS/ email and monitoring of data generation/ report / displaying of dashboard at LIOC HQ etc)	AGREE
6.	SCOPE OF WORK FOR PART C:	
6.1	Comprehensive AMC shall be for 2 years starting on the date following the date on which the 1 year warrantee ends.	AGREE
6.2	The supplier shall have to check the functionality of all the equipments including test deployment once in every 3 months (calendar months being counted for this preventive maintenance of automation system at RO)	AGREE
6.3	All required repairs/ replacement/ modification as required shall be completed and certification for functionality shall be received by SVP (ENGG), Lanka IOC before releasing quarterly payments of AMC. Delay would be considered for the purpose of LD in case the functionality report is not received the manner and time as above.	AGREE
6.4	Any and all required repairs, replacement shall be entirely in the Scope of Works of the Automation Vendor/ successful bidder and no compensation shall be payable except the AMC charges as agreed as finalized in this tender.	AGREE
6.5	A summary of the tests undertaken and the repairs/ replacement made shall be submitted to the SVP (ENGG)	AGREE
6.6	A certificate of functionality shall be issued by the Automation Vendor / Successful bidder once in every 3 months.	AGREE
7.	THIRD PARTY INSPECTION AND SAT:	
	Undertaking of SAT (Site Acceptance Tests) after installation & commissioning of the wireless automation systems of dispensing units &	

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	product tanks at respective 100 Nos of ROs and all materials and equipment (Pre-dispatch) to be supplied as part of this tender invited shall be subject to the Third Party Inspection by any of the following: a. M/s. Projects and development India Limited, Mumbai b. M/s. Indian Register of Shipping, Mumbai c. M/s. Lloyd's Register of Shipping, Mumbai d. M/s. Bureau Veritas Industrial Services (India) Pvt Ltd, Mumbai e. M/s. Det Norske Veritas, Mumbai f. M/s. SGS India Limited, Mumbai g. M/s. UL India Pvt Ltd, Bangalore h. M/s. Phistream Consulting Private Limited, New Delhi	
7.1	Lanka IOC Plc shall be at liberty to nominate an independent Third Party Inspection Agency to verify the certification and in case of any contradiction; the Supplier/ Successful bidder shall be obliged to correct the same by way of additional tests/ repair/ replacement at no extra cost to Lanka IOC. The cost of all TPI including pre-dispatch of material as well as SAT (Site Acceptance Tests) after installation & commissioning of the wireless automation systems of dispensing units & product tanks at respective 100 Nos of ROs is in the vendor's account.	AGREE
7.2	It is vendor's responsibility to arranging a TPI agency for pre dispatch of material as well as executing SAT after installation, testing & commissioning of the automation systems at respective 100 ROs and SAT & QAP shall be certified by TPI agency with reference to the tendered specifications. Pre-dispatch of material report & SAT reports shall be submitted to LIOC including QAP report.	AGREE
8.	The Terms and Conditions of Tender shall be read in conjunction with the General Conditions of Contract, Specifications, Bill of Quantities and other documents forming part of this Contract wherever the Contract so requires.	AGREE
9.	The several documents forming the Contract shall be taken, as mutually explanatory to one another and in case of any discrepancies; the Bill of Quantities shall prevail over the Specifications and the Terms and Conditions over the General Conditions of Contract. In case of any dispute, question or difference either during the execution of the Contract or any other time as to any matter or thing connected with or arising out of this Contract, the decision of the SVP (E)/ Lanka IOC, thereon shall be final and binding upon all parties.	AGREE
10.	The Contract will include the Bid Documents with the General Conditions of Contract and the Bidder's Offer as finally accepted, together with Addenda, if there be any. General Conditions of contract are the integral part of the tender / contract. The above mentioned General Conditions of Contract may be reviewed at the office of the undersigned during the pre-bid meeting which has been scheduled before quoting for the Tender.	AGREE

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11.	Lanka IOC PLC reserves the right to obtain revised commercial bid to the extent and in areas required from the technically acceptable bidders.	AGREE
7.	Lanka IOC PLC is not bound to accept the lowest or any tender and reserve the right to accept a tender in full or in part and / or reject a tender in full or in part without assigning any reason thereof.	AGREE
8.	The contract shall be governed by all relevant Acts as in Sri Lanka and applicable only within the jurisdiction of the High Court at Colombo.	AGREE
9.	Intending bidders must take into account any cost or expense incurred by them in connection with the preparation and delivery of their bids or for any other expenses incurred in connection with such bidding.	AGREE
10.	Bidder shall get himself thoroughly familiarized with the intended purpose of wireless automation of DUs and Product Tanks at 100 Retail Outlets across the Island before submission of the tender. Non compliance of the same will in no way relieve the successful bidder of any of his obligations in performing the work in accordance with this Bid Document within the quoted price.	AGREE
11.	VALIDITY : The tender shall remain valid for acceptance for a period of 120 days from the date of opening of the same. If before expiry of validity period, the Bidder amends his quoted rates or tender, making them unacceptable to the Trustees and / or withdraws his tender, the Earnest Money deposited shall be liable to forfeiture at the option of the Trustees / sanctioning Authority.	AGREE
12.	NON- RESPONSIVE BIDDER :- The offer/tender shall be treated as non-responsive for following reasons:-	
12.1	If 120 days validity from the date of opening of techno-commercial bid is not accepted / agreed to as per tender condition.	AGREE
12.2	If offer / tender is submitted with any deviation from the tender terms & conditions.	AGREE
12.3	The bidder for Part A i.e. "Supply, Delivery, of wireless automation system for Dispensing units and Product Tanks" at 100 Nos petrol stations of Lanka IOC PLC, Sri Lanka" must include providing of all the items (i.e. all the necessary hardware & software) require for proper functionality of the wireless automation system of all DUs and respective Product Tanks at 100 ROs. (Bid for supply of partial items shall be rejected).	AGREE
12.4	The bidder for Part B i.e. "Installation, Testing & Commissioning of wireless automation system for Dispensing units and Product Tanks" at 100 Nos petrol stations of Lanka IOC PLC, Sri Lanka" has to quote for all the items (i.e. Installation, Testing & Commissioning of all Hardware & software) for the proper functionality of the wireless automation system of all DUs and respective Product Tanks at 100 ROs (Bid for installation/ testing & commissioning of partial items shall be rejected).	AGREE
12.5	The bidder for Part C i.e. "Comprehensive AMC for 2 years" must include proper functionality of the wireless automation system of all DUs and	AGREE

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	respective Product Tanks at 100 ROs with 1 Year Warrantee period plus 2 years AMC period. Comprehensive AMC shall be for 2 years starting on the date following the date on which the 1 year warrantee ends. (Bid for 1 year warrantee & 2 year AMC other than the above requirement shall be rejected).	
12.6	Price Bids, containing any sort of qualifying expressions will be rejected.	AGREE
13.	SECURITY DEPOSIT :	
13.1	Earnest Money/Bid Security of the successful Bidder shall be retained till submission of Bank Guarantee as detailed below.	AGREE
13.2	Security Deposit, which shall be equal to 10% of the PO value and bidder to be executed in the form of Bank Guarantee as per Proforma (Annexure-IX) from a Bank of Sri Lanka or reputed foreign bank having branch at Colombo, Sri Lanka. Or by way of Demand Draft in favor of Lanka IOC PLC and payable at Colombo in the currency as in the work order.	AGREE
13.3	Security Deposit shall have to be deposited by successful bidder within 30 days from the date of placement of Order/Letter of acceptance, failing which the trustees reserve the right to cancel the order/acceptance and forfeit the Earnest Money/Bid Security.	AGREE
13.4	Security Deposit shall be refunded without interest after successful execution of order/contract and satisfactory completion of guarantee period.	AGREE
13.5	In the event of the successful bidder failing to execute the order/contract within the stipulated delivery/completion time without sufficient/valid reason acceptable to the trustees, the Security Deposit may be forfeited and the order/contract may be cancelled at the option of the trustees.	AGREE
14.	PRICE BASIS:	
14.1	Instructions For Foreign Bidders	
14.1.1	Foreign bidder shall quote firm prices without any variation on the basis of DDP, Delivered Duty Paid up to final destination i.e. respective 100 ROs of Lanka IOC PLC, Sri Lanka including installation wherever required. The term DDP shall be as defined in the current edition of International Rules for the interpretation of the Trade Terms published by the International Chamber of Commerce, Paris and commonly referred to as INCOTERMS.	AGREE
14.1.2	The prices quoted shall remain firm till completion of work. No price variation will be allowed in any situation from the date of opening of Bid.	AGREE
14.1.3	Vendor should have a company registered in Sri Lanka or should have direct/indirect subsidiary company registered in Sri Lanka for the after sales services. In case, if above company registration is not available, vendor shall submit an undertaking stating that, same will be submitted	AGREE

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	within 35 days from the date of placing of LOI (Letter of Intent). Failing which; EMD will be forfeited.	
14.1.4	The prices should be quoted only in one currency preferably in USD or Euro.	AGREE
14.1.5	Payment of any amount would be subject to applicable withholding tax.	AGREE
14.2	Instructions For Sri Lankan Bidders	AGREE
14.2.1	Sri Lankan bidders shall quote firm prices in Sri Lankan Rupees (LKR) only and without any variation on Free Door Delivery basis i.e. Free Delivery up to respective 100 ROs of Lanka IOC PLC, Sri Lanka at their risk, cost and arrangement including installation wherever required.	AGREE
14.2.2	The prices quoted shall remain firm till completion of work. No price variation will be allowed in any situation.	AGREE
14.2.3	The quoted price, which shall include all Taxes and Excise Duties, Customs Duty, leviable on the final finished supplies and installation including handling, loading, unloading, Freight & Other charges,	AGREE
14.2.4	Wherever VAT is applicable, would be payable as per the prevailing VAT rates subject to Sri Lankan(Local)Bidder declaring the items on which VAT is payable. For the local bidders only VAT shall be payable in applicable, rate.	AGREE
14.3	Instructions For Both Sri Lankan & Foreign Bidders:	
14.3.1	The Basic Price for Supply (Part A) shall include charges of Pre-dispatch Third Party Inspection and other necessary charges for completion of dispatch / delivery as described in the scope of work of the tender excluding installation/ testing & commissioning charges & excluding AMC charges.	AGREE
14.3.2	Bidder will have to quote (Part B) installation/ testing & commissioning charges and (Part C) AMC charges separately and for which Separate invoices shall be raised for each part in the scope of works in the contract.	AGREE
14.3.3	Quoted Prices should be made only for units specified in the "Schedule of Tender".	AGREE
14.3.4	Statutory Duties shall be paid by the bidder and documentary evidence submitted to Lanka IOC (if demanded) for all works as applicable during the currency of the contract.	AGREE
14.3.5	Price(s) to be quoted should remain firm till the goods are delivered and Commissioned successfully. No Price escalation is admissible.	AGREE
14.3.6	Please note that Lanka IOC does not provide any concessional duties etc for any import/store and local transport etc.	AGREE
14.3.7	If new statutory taxes/duties or any changes in existing statutory taxes/duties come in force in Sri Lanka, the same will be paid as applicable currency of contract. Any benefit out of it has to be passed on to LANKA IOC PLC Documentary evidence for this purpose is to be	AGREE

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	produced by the contractor/supplier.	
14.4	CONTROL REGULATION : Supply and dispatch should be arranged by the foreign supplier in strict conformity with Control Regulations wherever applicable and after obtaining permits, if any, required under the regulations in force from time to time. All Government Levies and Duties etc. as applicable in Supplier's Country will be borne by the supplier.	AGREE
15.	EVALUATION CRITERIA	
15.1	The bids / tenders received would be evaluated among the techno-commercially qualified bids subject to the fulfillment of necessary tender conditions as detailed below. A) When the bids of Foreign bidders are concerned, the DDP price, (Delivered Duty Paid up to destination, 100 ROs of Lanka IOC PLC, Sri Lanka) would be the basis of comparison of bids including the installation charge, Comprehensive AMC (i.e. Part A + Part B + Part C) of the entire Scope of Works shall be quoted in USD or EURO only . (Shall be quoted in single currency(USD or EURO only) and quoted currency shall be clearly marked by the Foreign bidder) B) When the bids of Sri Lankan(Local) bidders are concerned, the price on Free Door Delivery basis upto 100 ROs of Lanka IOC PLC, Sri Lanka at supplier's risk, cost and arrangement including the installation charge, Comprehensive AMC (i.e. Part A + Part B + Part C) of the Scope of Works, shall be quoted in LKR only . (currency (LKR) shall be clearly marked by the Sri Lankan (Local) bidder) C) The daily Indicative Exchange Rates as on the date of opening of Technical Bid as published by Central Bank of Sri Lanka shall be considered for the purpose of bid comparison. D) When comparing the quoted rates of Foreign bidders & Sri Lankan (Local) bidders, the quoted landed costs on DDP basis of Foreign bidders will be compared with the quoted cost inclusive of VAT(if applicable)for Sri Lankan (Local) bidders.	AGREE
16.	PAYMENT TERMS:	AGREE
16.1	50% Payment will be made as per measure & pay basis after successful completion of work (supply / installation /Testing & Commissioning) of automation systems at respective ROs with reference to the PO.	AGREE
16.2	Balance 50% payment will be made once satisfactory completion of work of automation systems at respective ROs with reference to the PO including SAT as per clause 07 and clause 41 of tender.	AGREE
16.3	Mode of Payment for Foreign Bidder : Payment shall be made by direct remittance to the banker of successful foreign bidder through international banking system by LANKA IOC PLC's banker in Sri Lanka against invoice and other documents stated in the contract. (Local Agent's commission shall be directly payable by the Foreign Bidder to Local Agent / no separate payments will be entertained for local agent / service provider of Foreign Bidder)	AGREE

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16.3.1	Bank Charges: All Bank Charges and stamp duties, if any, payable in relation to Supplier's Bank in connection with payment shall be borne by the supplier/ automation vendor.	AGREE
16.3.2	Documents & information required for payment are as follows:- Name & address of Supplier's Bank with email ID, Fax & telephone Supplier's Bank account number & other particulars Invoice in quadruplicate Delivery Order in quadruplicate Packing List in quadruplicate Inspection Report of Third Party in duplicate Manufacturer's Test Report in duplicate Country of Origin Certificate Clean Bill of Lading/Airway Bill Guarantee Certificate of Manufacturer's/ Principal's in duplicate Quality certificate from Manufacturer's/ Principal's in duplicate Sri Lankan Customs Bill of Entry All the above documents will be drawn in favour of, Lanka IOC PLC.	AGREE
16.4	Mode of Payment for Sri Lankan (Local) Bidder: Payment shall be made to successful Sri Lankan bidder through RTGS/ECS/NEFT mechanism	AGREE
16.4.1	Documents & information required for payment are as follows:- Name & address of Supplier's Bank with email ID, Fax & telephone Supplier's Bank account number & other particulars(branch code of Bank, IFS code & MICR code of the Bank) Invoice in quadruplicate Delivery Invoice in quadruplicate Packing List in quadruplicate Inspection Report of Third Party in duplicate Manufacturer's Test Report in duplicate Guarantee Certificate of Manufacturer's/ Principal's in duplicate Quality certificate from Manufacturer's/ Principal's in duplicate	AGREE
17.	TIME OF COMPLETION : The time of completion of work as stated in the PO as per the scope of works indicated in the PO.	AGREE
17.1	Work completion time shall be binding on the supplier. If work is not completed within the time stipulated in the PO without assigning any acceptable reason to the Trustees, the order may be cancelled without notice at the option of Trustees. In the event of failure to execute the order, Trustees will take penal action against the supplier and his name will be removed from the list of vendors.	AGREE
17.2	In case of default in completion of work in time or, failure to deliver as per correct specification or, the approved quality within the time stipulated Trustees are entitled to purchase the items and get work done from any other source at the risks, costs and expenses of the supplier.	AGREE

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	Such purchase may comprise the whole or, any portion of the supply/ work remaining undelivered/ unfinished or, not approved.	
18.	DESPATCH ARRANGEMENTS:	
18.1	For Sri Lankan Bidder Materials are to be delivered at 100 Retail Outlets of Lanka IOC PLC across the Island, by the supplier at their cost, risk and responsibility.	AGREE
18.1.1	The supplier shall be fully responsible for any transit loss or damage to the materials.	AGREE
18.1.2	The supplier shall send advance intimation as to the actual date of delivery of each and every installment of supply. Delivery of materials will not be accepted on Sundays and Port Holidays. The authorized representative of the suppliers should be present at the time of delivery for jointly noting with the representative of LANKA IOC PLC, the discrepancies, if any, regarding the particulars of materials actually delivered against the Invoice for the same. Delivery will not be accepted if not accompanied with proper delivery Invoice (in quadruplicate) and other related documents like Manufacturer's Test certificates, etc..	AGREE
18.2	For Foreign Bidder The supplier shall dispatch the consignment on the basis of DDP, Delivered Duty Paid up to destination i.e. 100 Retail Outlets of Lanka IOC PLC across the Island at their cost, risk and arrangement.	AGREE
18.2.1	Port of Import/Discharge: Colombo as on discretion of the Supplier. Lanka IOC shall take no responsibility for clearance of goods on any account whatsoever.	AGREE
18.2.2	Airport of Import/Discharge: Bandaranayaike International Airport, Katunayake.	AGREE
18.2.3	IMPORTER'S CODE: Our VAT No. is 114314315-7000 and TIN No. is 114314315	AGREE
18.2.4	The foreign supplier shall arrange clearance of consignment from customs and Port/Airport of import/discharge at their risk, cost and arrangement.	AGREE
19.	INSPECTION AT DESTINATION:	
19.1	All supplies are subject to inspection before acceptance by SVP (E), LANKA IOC PLC or his authorized officer. In case the equipment supplied is not in good condition/suitable, supplier shall have to replace it at his own cost immediately.	AGREE
19.2	Final acceptance and certification of work will be done by SVP (E), LANKA IOC PLC or his authorized officer.	AGREE
19.3	Any material/part/component, if found defective or not up to the standard quality, shall be forthwith rejected and the same shall be replaced by the supplier free of cost.	AGREE
20.	GUARANTEE : All the items stated in the tender BOQ will be guaranteed by the supplier for a period of 01 (One) years from the date of satisfactory testing,	AGREE

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	commissioning and handing over of equipments and materials against any manufacturing defect and poor performance. If such defect is noticed during guarantee period, the supplier will have to rectify/ replace the defective items and put the system into operation free of cost. A guarantee certificate must be submitted by the supplier. During the guarantee period, the supplier/ successful bidder shall have to certify the proper functionality of the material every 3 month after inspection and after completing any and all required repairs/ maintenance etc. Such inspections/ repairs shall be followed by a report to be jointly signed with Lanka IOC representative to be nominated by SVP(ENGG). Failure to adhere to above may render the forfeiture of the Security Deposit.	
21.	TEST CERTIFICATE : The successful bidder should provide original manufacturer's (OEM) test certificate(s) of the product(s) mentioning Make, Brand name and Country of Origin.	AGREE
22.	TRANSIT RISK : For Sri Lankan Bidder Transit risk will be on supplier's account since the delivery is to be made on F.O.R. destination basis. For Foreign Bidder Transit risk will be on supplier's account since the delivery is to be made on D.D.P destination basis.	AGREE
23.	REJECTION OF MATERIALS : Notwithstanding the Inspection, Testing and Trial of equipment and materials by SVP (E), LANKA IOC PLC or his authorized officer any material found to be defective in quality and not conforming to the relevant specification, shall liable to be rejected and the supplier shall replace the same at his cost and arrangement at the earliest. The supplier shall at his own arrangement and cost replace within a period of 1 (one) month of all such defective and rejected materials. Rejected materials shall be at Supplier's risk. They must be collected from the LANKA IOC PLC's premises within a fortnight from the date of rejection on observing usual procedure on the matter. If the contractor fails to remove such materials, the Trustees shall have the right to dispose of the same and the supplier shall have no claim against the Trustees in respect of the said rejected materials.	AGREE
24.	LIQUIDATED DAMAGES :	
24.1	If the supplier fails to complete the supply within the scheduled delivery period or such extension thereof, the supplier shall pay, as compensation and not as a penalty, Liquidated Damages to the Trustees @ 1% of the entire work order value i.e. the summation of the work order amounts for	AGREE

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	Part A & Part B , for every week or part thereof, (part of the week being treated as a full week) provided always that the amount of such compensation shall not exceed 10% of the value of contract.	
24.2	Without prejudice to any of their legal rights, the Trustees shall have the power to recover the said amount of compensation / damage from money due or, likely to become due to the supplier. The payment or, deduction of such damages shall not relieve the supplier from his obligations to complete any other liabilities and obligations under the contract.	AGREE
24.3	Any delay on the following two accounts beyond the time period on account of LANKA IOC PLC will be considered for non-imposition of L.D. provided the bidder submits documentary evidence to substantiate the same. a) Delay in issuance of clearance of site readiness beyond the stipulated time in the tender condition. b) Any delay in works in LIOC's scope.	AGREE
24.4	Delay in completion of the Scope of Works for Part C (AMC) would be result in levying of LD 100% for every day of delay per nozzle or per Tank of the automated DU/Tank basis or part thereof on the amount to be paid for the particular 3 monthly cycles. Delay by more than 10 weeks may result in forfeiture of the security Deposit and cancellation of AMC contract including penal measures.	AGREE
24.5	Calculating the delay for Scope of Works for Part C (AMC) - All the automated related breakdown maintenance within Colombo municipal limits (Colombo city + Locations within 25km radius from Colombo) shall be attended within 24 hours from the time of complaints lodged by Dealer of Petrol Shed/ Field Officer or Head office of LIOC. - All the automated related breakdown maintenance located beyond Colombo municipal limits but within 100Km from the city of Colombo shall be attended within 48 hours from the time of complaints lodged. - All the automated related breakdown maintenance located beyond 100 Km from Colombo City limits shall be attended within 72 hours from the time of complaints lodged.	AGREE
25.	RISK PURCHASE : In case of supplier's failure and at the absolute discretion of the SVP (E), Lanka IOC the work may be ordered to be completed by some other agency at the risk and expense of the supplier (successful tenderer) after a minimum three days' notice in writing has been given to the supplier by the SVP (E), Lanka IOC or, his representative. In case of risk purchase extra cost will be borne by the supplier (successful tenderer).	AGREE
26.	BANNED OR DE - LISTED CONTRACTORS: Bidders must give a declaration to the effect that they have not been banned or, delisted by any Government or, quasi - Government agency or, PSU. If a bidder has been banned / de-listed by any Government or,	AGREE

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	quasi -Govt. agency or, a PSU, the details of any such ban must be clearly stated along with the relevant documents which the Bidder is to enclose together with the Techno-Commercial Bid. Incorrect declaration or, suppression of facts will lead to rejection of the Offer.	
27.	FORCE MAJEURE : In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under the Contract, the relative obligation of the party affected by such Force Majeure shall, upon notification to the other party, be suspended for the period during which Force Majeure event lasts. The cost and loss sustained by either party shall be borne by the respective parties. The term "FORCE MAJEURE" as employed herein shall mean acts of God, Earthquake, War, Revolts, Riots, Fire, Floods, Sabotage, Hurricanes/Cyclones and Strikes, excluding strikes by the employees of the Supplier or, their sub-Contractors. Upon occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid, shall notify the other party in writing immediately but not later 7 (seven) days after the alleged beginning thereof, giving full particulars and satisfactory evidence in support of its claim.	AGREE
28.	PACKING : The supplier shall be responsible for proper/strong packing being used in International Trade and delivery of materials. The supplier shall supply all materials properly packed in Weather proof, Sea/Air Worthy packing for Sea/Air Transport under tropical condition and for Inland Transport by Rail/Road or other appropriate transport in supplier's Country as well as in Sri Lanka for protection against any damage, loss, breakage or leakage etc. at their own cost. Each packing must be distinctly marked in English on outside showing consignee's Name and Address, Consignor's Name and Address, Packing List No., our Import Code No., Our Order No., etc. Please indicate dimension and gross weight (in metric system) of the packing.	AGREE
29.	JURISDICTION OF COURT & LAWS : a) The contract shall be governed by all relevant Sri Lankan Acts applicable within the jurisdiction of High Court in Colombo. b) All relevant rules and regulations and laws of Sri Lanka, that will be applicable for carrying out the work, shall be complied with by the supplier at their own cost, risk and arrangement.	AGREE
30.	WORKMEN COMPENSATION : The successful bidder(s) must cover his employees / workers, who will be engaged for delivery, unloading & stacking job at LANKA IOC PLC 's site, under workmen compensation act, fatal accident act and personal injuries insurance act for protection against any injury / accident and shall have to bear all the consequences and cost as applicable as per relevant acts.	AGREE
31.	PERSONAL PROTECTIVE EQUIPMENT(PPE):	AGREE

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	Suppliers and their workmen including driver & helper must use PPE i.e. safety helmet etc. at the time of supply of materials inside the dock premises.	
32.	AUTHORISED SALES/ SERVICE REPRESENTATIVE CERTIFICATE: The tenderer, if he is not the manufacturer of the equipment, shall submit certificate from the manufacturer (in original) that he is the sole manufacturer's authorized sales and service representative.	AGREE
33.	CATALOGUES AND MANUALS: The Contractor must supply the following records in English language only along with the Automation Systems for each RO. i) Three sets of maintenance manuals ii) Three sets of Spare parts Catalogues. iii) Three sets of Technical manuals with warrantee certificates.	AGREE
34.	DEALERSHIP CERTIFICATE: If the tenderer is an authorized dealer/ importer / distributor in Sri Lanka, a valid certificate issued by OEM/Principle for the same has to be submitted with tender.	AGREE
35.	EARLIEST ACCEPTABLE YEAR OF MANUFACTURE: The items should be supplied from the latest manufactured lot (not older than 6 months of date of manufacture) conforming to the current production standard at the time of delivery. Quality certificate from OEM will need to be submitted with the supply and bill.	AGREE
36.	PRE-DESPATCH INSPECTION : Pre-dispatch inspection of equipment and materials will be done by approved TPI agency which has been listed in the tender document (Clause No 7) Pre dispatch inspection will be arranged by the supplier. The cost of inspection shall be borne by the supplier.	AGREE
37.	OEM'S COUNTER GAURENTEE: A counter guarantee certificate shall be submitted by OEM/principal for providing service during guarantee period as per condition of contract if their authorized dealer/importer/distributor, who will execute the contract, is replaced / terminated by them or found to be incapable by trustees.	AGREE
38.	PRODUCT SUPPORT The supplier/ OEM will have to ensure and provide after sale product support service in Sri Lanka for the spares / stores, assemblies/ subassemblies, fitment items and consumables, Special Maintenance Tools (SMT)/ Special Test Equipment (STE), on comprehensive AMC basis for a maximum period of 03 years including 01 years of warrantee period.	AGREE
39.	The payment for AMC Charges shall be payable every 3 months (i.e. quarterly basis) after site inspection has been completed and certificate is given for the proper functionality of all the equipments provided after carrying out all required repairs/ replacements as the case may be and after successful completion of 1 year warrantee period.	AGREE
40.	TRAINING :	AGREE

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	Apart from the literature provided, field training on operation and maintenance of the Automated Equipment shall be imparted by the supplier free of cost to the Dealers / Pump attendants and officials nominated by SVP (E), LANKA IOC PLC.	
41.	Site Acceptance Test: After installation and commissioning, of wireless automation system at 100 ROs, SAT shall be undergo at least 100% of sites in presence of representatives of Lanka IOC. The said SAT shall be at the sole expense and risk of the supplier who shall bear all costs and liabilities of whatever kind arising out of the same. TPI shall be executed through an approved tpi agency which has been listed in the tender document (Clause No 7). It is vendor's responsibility to arrange a TPI agency for pre dispatch of material as well as executing sat after installation, testing & commissioning of the automation systems at respective ROs. Pre dispatch of material / SAT report and QAP reports shall be certified by TPI agency with reference to the tendered specifications.	AGREE
42.	Interpretation of Terms :	
42.1	"Engineer" means the SVP (E), LANKA IOC PLC (or his authorized representative) who has invited the tender for the purpose of this contract only.	AGREE
42.2	SVP (RS & HR) shall mean the in charge of the user department (department of Retail Sales LIOC), Lanka IOC or his authorized representatives.	AGREE
42.3	"Contractor" means the person or persons; Firm or Company whose tender /offer has been accepted by the Trustees and includes the Contractor's representative's heirs, successors and assigns, if any, permitted by the Board / Chairman.	AGREE
42.4	"LANKA IOC PLC " means Lanka IOC head office Colombo.	AGREE
42.5	"Successful Bidder" means Contractor defined under 49.3	AGREE
42.6	"Supplier" means Contractor defined under 49.3	AGREE
43.	Dispatch/Shipping Intimation: The supplier shall notify the trustees as soon as the consignment is shipped/ dispatched and send one set copy of shipping /dispatch documents to trustees.	AGREE
44.	Genuineness of Documents : The bidder shall submit a certificate in the prescribed Pro forma (Annexure-XI) to the effect that the necessary documents that are submitted as per tender conditions, are genuine and correct. In case, any document is found to be false/forged/incorrect at any point of time including execution of contract, he shall be liable for all consequences and responsible for making good any loss to the trustees. Moreover, in such case trustees reserve the right to take action against the bidder as deemed proper.	AGREE

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Annexure-II

(Documents to be filled up, signed and enclosed)

TECHNICAL SPECIFICATIONS

1.	Chapter1: Introduction																								
1.1	Objective The purpose of this document is to outline the broad functional requirements of the RO Automation System solution to be developed and customized based on LIOC business requirements for roll out at various Retail Outlets. In summary, the following items have been covered in this document. i. Business functions for LIOC - RO operations: - o Ease of RO Operation by Channel Partner, - o Effective monitoring and control by Oil Company, - o Offerings to Customers - enhancing Customer delight. ii. System Architecture iii. Process Flow of critical functionalities: - o Wireless communication between Dispensing units & FCC - o RFID Sticker based Customer Identification, iv. Real time communication with HOS & ITPS Server v. Real time integration with Payment systems. vi. Future compatibility.																								
1.2	Abbreviations used in this document: <table><tr><th>No .</th><th>Abbreviation</th><th>Description</th></tr><tr><td>1.</td><td>ATG</td><td>Automatic Tank Gauging</td></tr><tr><td>2.</td><td>BOS</td><td>Back Office System</td></tr><tr><td>3.</td><td>HOS</td><td>Head Office System</td></tr><tr><td>4.</td><td>CSV</td><td>Comma Separated Values</td></tr><tr><td>5.</td><td>DU</td><td>Dispensing Unit</td></tr><tr><td>6.</td><td>FCC</td><td>Forecourt Controller</td></tr><tr><td>7.</td><td>FDS</td><td>Functional Design Specification</td></tr></table>	No .	Abbreviation	Description	1.	ATG	Automatic Tank Gauging	2.	BOS	Back Office System	3.	HOS	Head Office System	4.	CSV	Comma Separated Values	5.	DU	Dispensing Unit	6.	FCC	Forecourt Controller	7.	FDS	Functional Design Specification
No .	Abbreviation	Description																							
1.	ATG	Automatic Tank Gauging																							
2.	BOS	Back Office System																							
3.	HOS	Head Office System																							
4.	CSV	Comma Separated Values																							
5.	DU	Dispensing Unit																							
6.	FCC	Forecourt Controller																							
7.	FDS	Functional Design Specification																							

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	8.	RO	Retail Outlet	
	9.	TLS	Tank Level System	
	10	TP	Thermal Printer	
	11	GUI	Graphic User Interface	
	12	DSM	Driveway Salesman	
	13	MOP	Method of Payment	
	14	EDC	Electronic Data Capture	
	15	EMV	Europay, MasterCard, Visa	
	16	SPD	Surge Protection Device	
	17	UPS	Uninterrupted Power Supply	
	18	RFID	Radio Frequency Identification Device	
	19	CRM	Customer Relationship Management	
	20	PCI-DSS	Payment Card Industry Data Security Standard	
	21	ITPS	Independent Transaction Processing Server	
	22	CA	Customer Attendant	
2.0	Chapter 2: System Architecture			
2.1	System Components The proposed RO Automation System is being interfaced with Dispensing Units to control fuelling operation of the Retail Outlet. It also provides online stock measurement of MS and HSD and branded fuels available at the RO through ATG System along with any water that might be present in the underground tanks of the RO. ATG System will record the product receipts and the FCC will permit SAP Invoice based manual entry of the tank truck receipt data at the RO. Thus, it will provide the means to monitor the overall operation of the RO and generate reports on various transactions being captured at the System end. Based on the operational requirement, the proposed RO Automation System solution,			

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it is logically divided in following parts:

- i. Forecourt Controller with wireless interface with Dispensing Units.
- ii. Back Office System (Inbuilt in the FCC)
- iii. ATG System
- iv. Attendant Tag reader mounted on Dispenser
- v. RFID Attendant Tags - for Dispenser Authorization
- vi. RFID Windshield tags for customer identification
- vii. Interfaces with various Data Servers and Live Communication with HOS, ITPS & Other Servers
- viii. Interface for Display of RSP on Digital Panel in Monolith

Additionally, EDC for settling payment transactions in forecourt through Independent Transaction Processing Server (ITPS) and issuing print receipt of transactions.

2.1.1

Forecourt Controller:

Forecourt Controller is the device, which provides the interface with following devices and controls and monitors their operations:

- i. Forecourt Controller with in-built battery backup of 30minutes.
- ii. Wireless Integration of Dispensing Units (MS and HSD DUs) along with their in-built printers.
- iii. Auto Tank Gauging System (ATG Probes & Console).
- iv. Capability for integration of wireless EDCs.
- v. Live Communication with Head office System.
- vi. Interface with LIOC's Monolith for displaying Retail Sales Price.
- vii. Interface with ITPS.

The forecourt controller (FC) must have a solid state / embedded operating system to work in real time based architecture. For technical specifications, please refer FCC specification table.

FCC combo shall be provided with separate card for FCC and separate card for BOS as per specification provided and exchange data. Whenever, FCC fails BOS should take over functionality of FCC as specified under functionalities/specifications of FCC and support system to an extent of 1 lakh transactions. There shall not be any manual switchover for redundancy. If BOS fails FCC should provide functionality of BOS thru remote web server. Thru remote web server of FCC, all functionality should be available with limited GUI. Vendor to provide, operation redundancy of FCC can be provided on wireless slave side/ or wired unit also (support at least 2000 transaction per DU) . In that case once FCC comes online transaction gets transferred to main FCC. At no point of a time automation shall be offline.

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Vendors shall provide suitable power conditioning system to ensure that FCC, BOS and all electronic components are protected against all types of surges, Voltage fluctuations, short circuit protections including lightening and earth faults. It is the responsibility of vendor to change the equipment in case of burnout or failure on account of any reasons and separate payment will not be made for replacement. Power conditioning provided shall take care of voltage range from 120 to 300 V AC and also at the frequency range of 40-60 Hz. Power for both the cards shall be supplied thru separate SMPS. Any replacement of batteries, cards etc required for power conditioning equipment shall be done by vendor at their cost till the end of AMC period. Failure of power conditioning system shall be treated as failure of FCC.

FCC should have capacity to store data backup of min.1years data.

Through an Independent Transaction Processing Server (ITPS) integration of Wireless EDCs for Print Receipts, Loyalty Transactions, Payment Solutions to be done.

FCC will be mounted inside the available Sales Room of the RO in an enclosure. FCC will be loaded with software for controlling various Forecourt devices and web based BOS application with various GUI and User Interface and for generation of reports.

One LED monitor as user interface of minimum 18" size, Keyboard and Optical Mouse will be connected to FCC for accessing, viewing and performing various operations and accessing of reports by the User.

FCC will have capability for Wired and Wireless interfaces to connect to various forecourt devices such as DUs, EDCs (capability is required to meet future requirements, direct integration of EDC with FCC is not planned in this tender),

Readers, Price Display Unit(s) in Monolith and ATG devices with provision to enable and disable these devices through its application functionalities.

Through customized application, FCC will also communicate on real time basis over internet with HOS for Stock, Issue, Receipt and Alarms (SIRA) and all other database Servers of LIOC i.e., Payment solutions (ITPS), RFID for seamless operations and vendor's own Server for software up-gradation/updation.

FCC will always be provided with conditioned power supply through SPD

2.1.2 Back Office System

Back Office System will be a part of FCC and its web based application will be designed to perform the following operations:

- i. It will provide a visual representation for control of DUs and other forecourt devices installed/ provided in the forecourt through its Graphical User Interface (GUI).
- ii. It will also allow managing the day-to-day running of the forecourt and provide various MIS Reports.

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- iii. BOS application will be installed on the FCC, which will be accessed through monitor, keyboard and mouse connected to the FCC. Automation software application loaded in the FCC should be enabled for periodic up-gradations as and when required from the Vendor's backend System without the need for physically visiting the RO to carry out the up-gradation.

2.1.3 Automatic Tank Gauging (ATG) system:

ATG Probes will be directly integrated with FCC through IS barrier. IS barrier should be part of FCC enclosure which will be mounted inside the sales room of the RO.

One number of ATG equipment will be provided in each underground tank. This equipment will read product level, water level and temperature of the product in the tank and will transmit product and water level (within the permissible accuracy limit of +/- 4mm in field conditions with reference to manual gauging in vogue at the RO) and temperature data to the FCC.

This ATG system will communicate the captured tank data to FCC at an interval of 60 seconds.

FCC will locally store the captured ATG data for every clock hour and will also transmit the same to HOS on hourly basis.

Note - there should be provision in the system to enter manual tank stock entry & TT receipt Invoice entry in absence of ATG system. Based on the manual readings entered Reconciliation should happen in the system

2.1.4 EDC Machines/HHR (Hand Held Reader)

Wireless EDC machines are to be provided for composite functionalities i.e., Manual entry of Customer details, processing for payment transactions, and generating related charge slips and printout of Automated bills / charge slips for issuance to Customers.

These EDC machines will be integrated with Independent Transaction Processing Server (ITPS) through internet (GPRS).

FCC would be sending all transactions (Stock, Issues, TT Receipts, and Alarms etc) on real time basis to HOS. In addition, FCC would also be sending only Sales Transactions (Issue Records) to ITPS on real time basis.

"EDC" machine will fetch the nozzle wise last three issue transactions from ITPS for Payment / Print Receipts / Entering Customer details (Mobile number and/or Vehicle Number) .

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ITPS interacts with the Payment for completion of the transaction towards generation of charge slip at POS.

After processing the transaction, EDC will communicate back the updated transaction to ITPS. Consequent upon completion of the transaction, the issue record will get updated in ITPS with regards to payment process (credit/debit/wallet etc.), if undefined, is to be considered as "Cash".

Printing of transaction shall always be available through DU printers integrated with FCC based on same feature permitted in DU protocol.

Note:

1. EDC should also have capability to read NFC cards in addition to magstripe & chip cards.
It is proposed to have at all EDC devices which can operate both on Wi-Fi and GPRS. Also should have NFC card reading capability.
2. It may be noted that in the above process flow, EDC is not connected with FCC hence NPND interlock feature based on EDC Printout will not be available. However, NPND interlock through FCC controlled DU Printers will be available to the extent technically feasible as per DU Protocols.

Customer Identification through EDC

In order to capture the Vehicle number, EDC should also have the capability to manually keying in the Vehicle number and Mobile number to facilitate generation of SMS from the backend LIOC SMS Server.

SMS delivery should also be possible by using unique number (Cording System) issued to customer by LIOC at the time of Customer registration. So after fuelling instead of entering customer vehicle & customer mobile no. attendant can only enter this unique no. issued to customer. This unique no. sticker will be stucked on customer vehicle by LIOC/Dealer staff. This unique no. will be mapped against customer registration in HOS system.

Quick Print Option:

While the EDC would be designed to key in the Mobile number / Vehicle details (if not Automatically captured through RFID technology) and subsequently inputs towards Loyalty/ Payment transactions, a quick print option (without entering any of the parameters) should also be enabled in EDC for issuance of automated bills to take care of practical feasibility based on vehicular traffic at the RO. However, under this quick print option, SMS envisaged to the Customer would not be possible.

Customer identification using RFID vehicle passive tag:

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Exclusive DU is fitted with RFID Reader in the nozzle to capture the customer vehicle details which are fitted with RFID Ring or other form factor tag as suitable for vehicle. Transaction and vehicle in this case are automatically linked as FCC gets authorization from RFID site controller this transaction after reading the vehicle number through RFID ring after FCC gets relevant inputs from backend Server directly Vehicles are already fitted with RFID vehicle passive Tags. The customer details like Vehicle Registration No. & card/ISO no., fuel grade etc are written on customer Tag. Same data is stored on the RFID server at the time of customer registration.

Min 4 Nozzle reader integrated with FCC via RFID site controller over RF per outlet will be provided. The Nozzle reader will be able to capture the RFID Tag data as soon as the Reader is brought in the proximity of RFID vehicle Tag, based on the details received from RFID server RFID controller sends pump authorization request to FCC & FCC authorizes pump accordingly.

The process flow of vehicle identification would be as follows:

1. Enrolled/Registered customer having vehicle Tag installed on his Vehicle drives in LIOC Petrol station.
2. Attendant Lifts the nozzle & and insert into fuel inlet of vehicle.
3. RFID Nozzle Reader installed on dispenser nozzle reads vehicle Tag information and sends it to Transaction Platform through RFID Site controller.
4. RFID Server/ITPS validates vehicle details received from RFID Site controller & sends authorization (based on the customer balance availability in customer prepaid account) to RFID site controller.
5. RFID site controller sends instruction to FCC for authorising the pump for the amount received from transaction platform.(throughout the fuelling nozzle reader has to be in contact with vehicle tag otherwise fuelling won't happen)
6. Once fuelling is completed, attendant puts back nozzle to dispenser boot.
7. RFID site controller sends final transaction amount to ITPS& Customer account will be debited for the amount he fuelled at Petrol station.

Automation Vendor also needs to provide mobile application for customer tag request, money loading & for providing preset from mobile application. Under one customer there should be provision to add multiple Vehicles & define preset per vehicle wise using mobile app.

2.1.5 Surge Protection Device

Surge Protection Device (SPD): The surge protection device would be provided the power would be routed through the SPD.

2.1.7 Interfaces with various Data Servers

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	Automation System would need to interact with ITPS & HOS server.
2.1.8	Electronic Payment System (EPS) Hand held EDCs: Integration with Handheld EDC machine: The multiple payment acceptances such as Credit Card, Debit Cards etc. at automated outlet is part the scope of Automation vendor. Vendor should enter into an arrangement with any Acquiring bank (Preferably Scheduled Bank) for collection of KYCs / sign up with LIOC merchant and for providing 'Merchant Acquiring Services' at Automated LIOC Retail Outlets either owned or operated by LIOC or LIOC Dealers. Bank would acquire the digital transactions at retail outlets as per respective Regulatory Norms. In case any Fintech company is involved in integration between automation vendor and Bank, they should be certified for PCI DSS. Providing Payment Platform, Dealer On boarding, Instant digital incentive as applicable directive of LIOC or government of Sri Lanka, Multiple Payment options, Transaction Acquiring, Dealer Settlement on T+1, Daily MIS to LIOC, Risk Assessment, Charge Back, etc. are in the scope of Automation vendor. Vendor will have an option to onboard merchants thru Hard Acquiring. Vendor should provide minimum of 3 EDC terminals. The payment option should enable the customer to pay and get e receipt without getting down from the vehicle: a) In the scope of vendor b) Vendor to supply GPRS and Wifi model c) Wireless Vendor can debit Applicable & agreed MDR/surcharge/Charges etc. & applicable Tax from daily settlement which is given to LIOC or LIOC dealer on T+1 basis. Any future revision and / or MDR on Debit & Credit Card Transactions would be made applicable for the subject agreement with immediate effect. Fixed Rental of LKR2500/- + applicable tax per terminal per month, towards Portable GPRS machine where in Vendor has to provide secure SIM connectivity, to be collected from LIOC Dealers.
2.1.9	Live Communication with HOS & ITPS Servers Automation System needs to communicate on real time basis with HOS and ITPS Servers as mentioned in this document towards settlement of Payment transactions, post fuelling SMS to customers and communication of RO data with regards to Masters, Stocks, Issues, TT Receipts, and Alarms to HOS server on real time basis.

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Chapter3: System Components

RO Automation system is having the following components:

No.	Device	Quantity
1.	Forecourt Controller (wireless)	One Unit
2.	Wireless interface for DU	As per actual requirement of the RO
3.	Modem cum Router	One Unit Per RO
4.	Network Switch	As per actual requirement of the RO
5.	SPD	One Unit
6.	ATG Probe	As per actual requirement of the RO
7.	Live Connectivity for Real Time Data transmission	Broadband / V- SAT

3.1

Dispensing Units

DUs may be a single, dual or multiple displays per dispensing unit. Each pump may have one or more nozzles. Each RO may have one or more makes and models of DUs; however, it shall be preferable to have homogenous (same make) dispensing units at a particular RO.

Note: Definition of Fuelling position / Pump:

- It is equivalent to number of nozzles for Mono and Dual pumps.
- It is equivalent to number of displays for MPDs.

The serial number of Pump and Nozzles at the RO in RO automation system has to be same as maintained in the data base of Retail Dash Board (RDB) for Tanks and DUs (Display and Totaliser of the DU therein).

At the time of commissioning of Automation System, Automation Vendor will feed the SAP Code, Dealer Name, address in the RO Automation as per the latest SAP invoice at the RO.

If the SAP Code of the RO is changed, same should be updated by the Automation Vendor, as soon as requisition for same is communicated by LIOC.

Following parameters from the DU system will be captured by the Automation System:

- Log details (if available in DU protocol) of the DU calibration changes and K-factor need to be captured in the Automation System.
- Idle time out setting of the DU needs to be captured in the Automation system nozzle wise.

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3. Pre-set and Actual delivery (Volume and Amount) to be captured in Automation System.
4. Report of deliveries i.e., transactions for which delivered quantity are zero against a given preset quantity.
5. DU inbuilt NPND feature - Status whether this feature is enabled or disabled and logs.(if available in DU protocol)
6. Prints taken from DU inbuilt printer.(if available in DU protocol)
7. Price change log carried out at DU end through the DU key pad. This facility will help us to capture the RSP details / log set in the DU in manual mode, when the DU reverts back to auto mode and communicates with the automation system.(if available in DU protocol)

In addition the DU in-built printers will also be integrated with FCC.

The above mentioned DU parameters need to be communicated through DU protocol to Automation System.

3.2 HOS & Other Server connectivity

Central Management System will be provided & located at LIOC end. It will be connected with Automation System using proper connectivity for real time data transmission.

4 Chapter4: System Functions and Operations

Primary function of RO Automation system is to control, monitor and record fueling transactions and deliver wet stock reconciliation in combination with the ATG System.

This section of the document deals with various business logics specified by LIOC to meet the aforesaid objectives.

4.1 DU Control

FCC will control and monitor the connected DUs & their in-built printers (wherever DU has the provision) continuously for availability of status viz., idling state, fueling state, transaction completed state.

A GUI (synonymous to fueling position) of the pump status will be provided on the DU, Pump and fuelling Status (Product, Amount and Quantity) of BOS application.

The system will be expandable up to 36 fueling positions of different makes and models available at RO.

When a dispenser is connected to the Forecourt controller, FCC login to the dispenser

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and registers the following:

1. Read the nozzle totaliser,
2. Read, check and set nozzle prices as applicable,
3. Read the Preset at the beginning of the sale (if Preset quantity or amount is given by the attendant),
4. Read the calibration data of the DU.

Interlocks control features would be provided for access through HOS for authorization.

Wireless Communication between FCC & Dispensing Units:

1. WIRELESS EQUIPMENT FOR integration with DU,.

Communication between individual wireless forecourt devices and FCC in Sales Room should be without any dependency on 'line of sight'.

Wireless infrastructure should have similar system response times as specified for wired pump automation system e.g. DU authorization in less than 3 sec requirement as applicable for wired systems is also applicable for wireless automation system.

Communication reliability is agnostic of environmental effects like rain, any metallic or non-metallic hurdle. Wireless Automation equipment's installed on Islands and/or outer wall of Sales room are having operating Temperature range 10 Degc. To +60 deg. C. and housed in IP65 enclosures.

Wireless equipments / routers and network should have built-in features of remote maintenance and software upgrade. De-installation of routers/equipments for upgrade & maintenance or upgradation / maintenance using mobile phone / laptop in forecourt is not acceptable.

The maximum threshold power of radio frequency (9 KHz to 60 GHz) for continuous transmission or with pulses having duration greater than thermal ignition time, to be maximum 3.5 W (has to be limited by hardware only) as applicable for Group IIB as covered in IS: 60079-0:2011 clause 6.6.1 - RF Sources.

All wireless routers / equipments will be mounted above 1.2 meter from base of DU.

Necessary interconnecting cable-conduit (If Applicable) along with all corresponding I&C works between DUs / Printing Devices / Tag Readers etc. to such wireless Slave/router will be in vendor's scope. Cables / Conduits specifications for such interconnecting cables will be the same as being provided for wired option.

Communication between Island equipments and Sales Room equipments over wireless mode should be encrypted using non-standard AES implementation technique to

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prevent un-authorized third party hacking of sensitive data.
Though provisions have been made to make available UPS supplied power at DU Island, however, wireless equipments should have a robust design to work on raw power available at DU Island.

Wireless infrastructure is aimed at replacing cables from petroleum forecourt, vendor is permitted to draw UPS power (If available at Island), else 160-280V AC, 45-55 Hz un-regulated power from DU power JB should be used.

Drawing DC power from DU electronics / head is not permitted.

Necessary FLP glands to be utilized with DU JB for drawing such power. Vendor to use such power as input to all the Automation equipments proposed to be installed at/near DU Island. All Automation equipments proposed to be installed on wireless mode at Island / near Island must be robust to run on wireless mode.

Boot-up time for wireless router and connected Island equipment should be less than 30 seconds / DU boot-up time to ensure zero automation time lag in case of power disruption.

The same shall be demonstrated through manual power reset + associated logs during Pilot.

Vendor is permitted to install one wireless equipment having different hardware / software modules for all equipments at Island, or multiple wireless equipment at one Island for different devices is also allowed. Vendor to decide feasibility of wireless infrastructure based on individual RO conditions and can deploy the same at all ROs or part of it based on such assessment.

If at any point of time, wireless system is found to be not able to withstand the operational requirements of LIOC as compared to wired infrastructure, vendor has to implement the solution using wired infrastructure without any extra cost to LIOC.

Wireless Slave/Router device should be SMART one, all du related activity should get handled by SLAVE only. Transaction authorisation should happen within 3 second after lifting nozzle. Slave device should be with internal infinite read/write memory to store transaction in automation mode in event of FCC down. Each Slave device should have interface ports to accommodate interface with other nearby forecourt devices. When FCC is down business logics/rules set in FCC BOS won't be applicable but pump should continue to work in automation with wireless Router/salve device & should store minimum 1000 transactions per Dispensing unit .once is up & online with Slave salve should transfer all the stored transaction to FCC memory.

4.2 BOS Functions

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BOS application will provide all the functionality to effectively manage the Forecourt being controlled by FCC. Back Office web based application will perform following operations:

- Provide a visual representation for control of dispensers on the Forecourt through a GUI.
- Manages the day-to-day running of the Forecourt along with MIS Reports.
- Configure the FCC for controlling the ROs configuration.

BOS shall always be virus & malware protected through an auto updated standard Anti Virus& Malware protection application.

BOS Application shall be designed along following Menu Functions:

<i>Sub Menus</i>	<i>Description</i>
1.	RO Configuration, Product, Tank, PUMP, RSP, DU Lock/Block/Control
2.	DU Status GUI
3.	Tank Status GUI, Tank inventory table
4.	Live Status of the various equipments available
5.	Tank Truck Receipt entry, Shift Management, Price Scheduler, User configuration, User Rights, Prepay, Post pay, HOS, Density Register, Transaction marking
6.	Alarm Dash Board & Alarm Configuration
7.	UPS & SPD Monitoring
8.	Device Status & Communication Status
9.	Dry Stock Management
10.	Standard Reports & Other Customized Reports
11.	Trends Reports

4.2.1 Login

To open the BOS application user has to click a short cut icon placed on the Desktop Screen. A user must log in to the BOS application using a valid ID and password. This sets the current security profile of the User that has logged in. Another User may be logged in at any time by entering 'Login' details.

4.2.2 DU Status (RO Operation GUI)

DU Status provides a graphical real-time dispenser status display of the Forecourt as well as helps in dispenser control and monitoring.

An individual "cell" within the console represents each pump. Each cell consists of a

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	Dispenser Make, Product title/current Product in use, Unit Price the pump status, and transaction fuelled details cell & interlocking message cell. Coloured images are used to represent the current status of a pump allowing the RO personnel to quickly assess the status of Forecourt while working in the Sales Room.
4.2.3	User Interface The DU Status provides a graphical representation of the Forecourt. The user interface provides control of the Forecourt. The user interface can be driven by keyboard, mouse, or a combination of these. DU Status has one emergency stop button to stop all dispensers.
4.2.4	DU Control All the DUs can be configured to work by default on Need-authorize mode. In Need-Authorized mode, DU will operate for transaction only after the Customer attendant authorises the DU pump display through his FID reader. RFID tagreaders should be provided to all the customer attendants. Correspondingly there should be a RFID tag pasted for each of the concerned display of the dispensing unit. Option should be available to change the specific DU display or all DU displays from Pre-authorize mode to auto authorize mode as per requirement of the RO. All testing transactions shall be possible to be done only when DU is authorized through a RFID tag reader preconfigured through the BOS PC as testing RFID reader. Any RFID tag reader can be configured as testing tag reader and configured back as sales transaction tag reader through BOS application. When Pump display is authorized with Testing Tag reader, the corresponding delivery transactions shall automatically be marked as testing and pushed to ITPS and HOS. However such transactions shall not be available in EDC on call for any payment or loyalty transaction processing.
4.2.5	Tanks Status The Tank status provides the real time view of tank inventory using the ATG system interface of FCC and inventory reports are generated based on this. This data can be viewed from the Tank Status/GUI Page: Inventory data from ATG Console is requested every 60 seconds by FCC & same is displayed on the Tank status GUI Screen. For each tank configured in the system the grade is displayed, the current product volume, water level, and associated data such as capacity, ullage, etc.

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4.2.6 RO Operations

Using RO Operation tab, user can access all the functionality to effectively manage a Forecourt being controlled by Forecourt Controller. The following features to be made available:

- User Configuration & User Profiles.
- DU Control (Enable, Block, Stop All, Need Authorise and Auto Authorise).
- Shift Management.
- Dispenser Product Price change.
- Allocation of Customer Attendant Tags.
- Tank Truck Receipt Entry.
- Prepay Transactions.
- Transaction Marking from BOS application.
- Alarm Dashboard.
- HOS Data transfer Information.
- Density Register - Manual Entry by RO User.
- System should have provision to mark any transaction as testing transaction before the Auto shift closure time of 23:58 hrs.
- Discount Pricing - There will be facility to define product wise discount pricing for a User selected period defined centrally at HO and/or by the user at RO level updated in FCC through ITPS.
There will also be option to define discount levels as per the ticket size of the transactions. The discounts value will be deducted from the amount and would be reflected in the Automated bill and SMS to customer would have the communication of discount availed by him.
- In addition, customer specific discount shall also be appended to the transaction as per the logics available in ITPS.
In these cases FCC will push the transaction to ITPS as per prevailing RSP applicable at RO (after discount pricing, if any), ITPS in turn will apply the customer specific on the fly discount and customer will be charged accordingly through EDC.
- Considering the current competitive market scenario, it is necessary to have differential pricing / discount management capabilities in forthcoming Phase / upgrade of Retail Automation.
The capability must be flexible enough to provide for global as well as Province/City/RO specific discounts including time and slab based discount administration module.

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ITPS will be the master for managing this functionality to have effective and central control over important activity having cost implication. All such discounting rules shall get activated to concerned RO through HOS for defined period. The applicable discount can be of following nature:

1. Fixed discount on sale amount - eg. Rs. 50/- off on Sale of Rs. 2500/-
2. Fixed discount on quantity of fuel - eg. Rs. 40/- off on 25 litres of petrol.
3. Percentage discount on fuel value - eg. 0.40% off (fixed)
4. Differential percentage discount on fuel value slabs
5. Discount during certain time of the day
6. Discount during certain time of month/year.
7. Special discount on premium products

All these discount rules shall be applicable either globally or certain Retail Outlet/Divisional Office/State Office, Class of ROs, specified regions or stretch of highway or any such condition / situation as per business requirement.

Fuelling and Payment system under automated scenario shall have three separate systems; FCC, HOS& ITPS and therefore certain functionalities needs to be built in all these to effectively operate this system with appropriate communication to customer (printed receipts, SMS and email alerts) to achieve customer delight/loyalty. Details of feature to be built in all three systems have been discussed below:

A. Discount provision is at FCC level Discount

FCC should have feature of configuring promotional discount to any customer based on transaction size. e.g. 1% for transactions more than Rs.100/- and less than Rs.1000/- and 2% for transactions more than Rs.1000/-.

The discount defined here is local per site.

The discount will be calculated after transaction is made; no price will be changed on pump. On Printer receipt print the full amount, discount % and amount to pay.

Since discounts include MOP the actual discount will be calculated only once the MOPS is known. In most cases it requires that a receipt will be taken. For transactions that receipt was not issued, they will be marked as cash, after the defined timeout, however no discount will be applied to these transactions since the customer is not present any more.

Discount is applicable to all products the discount is to be calculated on the total transaction amount.

On all various reports, need to display both full amount and discount amount for proper reconciliation.

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There are two types of discount definition:-

Campaign:

This type has start date/time and end date/time. The following table includes all parameters user need to define.

Happy Hour:

This type has start time and end time (of the day) and the effective days of week.

Configuration Parameter (Campaign Period):			
HEADER DATA	SELECTION / VALUE	DESCRIPTION	
Start Date	01.03.2013	Start Date of scheme	
Start Time	06:00:00	Start time of scheme	
End Date	31.03.2013	End Date of scheme	
End Time	23:59:00	End time of scheme	
Multi Select or all			
Applicable on Pump(s)	Multi-Selected or All		
Applicable on	Multi-Selected or All		
Applicable on MOP	Selected or All		
SLAB 1 to slab 5 for each	Amount / Volume	Selection (Rs / Litre)	
Min value	Min amount / volume	Min value of (Rs / Litre)	
Max value	Max amount / volume	Max value of (Rs / Litre)	
Status	Active / Deactivate	If active run the ADD IN If Deactivate do not	
Discount	% / Value, Rs	Discount in% of Rs/ Litre value of Rs/Litre OR Rs only	OR specify Rs Only
Configuration Parameter (Happy Hour)			
HEADER DATA	SELECTION /	DESCRIPTION	
Start Time	06:00:00	Start time of scheme	
Periodicity	(Monday,Tuesday.....) Multiple selections to be		
End Time	23:59:00	End time of scheme	
Applicable on Product	Multi-selected or All		
Applicable on Pump(s)	Multi-selected or All		
Applicable on MOP	Multi-selected or All		

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SLAB 1 to 5 for each product	Amount / Volume	Selection (Rs / Litre)	
Min value	Min amount /	Min value of (Rs / Litre)	
Max value	Max amount /	Max value of (Rs / Litre)	
Status	Active / Deactivate	If active run the ADD IN IfDeactivate do	
Discount	% / Value, Rs	Discount in % of Rs/Litre value of Rs/Litre OR Rs only	OR specify Rs Only

User can define maximum of 5 discount lines per each campaigns or happy hours. Each is applicable to a specific MOP(s), Pump(s) and Product(s), one of each or multi selection.

Each discount type can have up to 5 slabs or levels of discount per the transaction amount or volume.

A discount line is applicable to a transaction if the transaction start time or end time is inside the time range defined. If start time does not exist only the transaction end time is used.

The transaction will be written with the original amount, as reported from pump, and the discount amount. In addition and indication which discount campaign or happy hour was applicable (best discount) In case two applicable campaigns have same discount the first one will be marked in transaction. This will allow future tracking and reports if such will be required.

All deleted discount lines by user must be available in system for future tracking.

It is possible that two discounts will overlap and will be applied to same transaction in this case customer will receive the higher discount. (No "double dipping").

Note: This feature shall be enabled or disabled at set up level (Admin/LIOC). If this feature is enabled, then only the discount shall appear in e bill. If discount option is not enabled then discount line shall not appear in e bill issued to customer.

Reports showing discount

All reports that shows sale amount need to be extended to show additional discount and Net Sale fields. For reports that have breakdown of MOP the two fields should be shown per MOP.

"Discount" - per transaction or total of absolute discount given amount "Net Sale" - per transaction or total of net amount paid.

Main reports are given below, where discount needs to be reflected as per above:

- Custom Reports

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- MOP Wise Reports
- Attendant Performance Report
- Shift Report (Daily)
- Audi Trail for Individual Transaction
- Vehicle number wise and segment wise report
- Nozzle utilization report
- Vehicle number wise report
- Fuel Sales Trend
- Daily Product Wise Sales based report
- Attendant wise MOP report

B. ITPS

Vendor will have to setup ITPS server for LIOC in their own secured data centre

- a. As all transaction processing and printing of receipts are now going to happen through ITPS, complete transaction details as mentioned above shall flow to ITPS.
- b. This transaction is fetched at POS including the discount details and receipt is printed showing RSP, base value, discount and discounted value which is payable by the customer.
- c. In case customer wants to pay using any e-money only discounted value is transmitted to payment processing server for realization. In this case also the printed receipt shows details as mentioned above.
- d. This transaction is then updated to HOS in the same format from where an SMS (in case of registered customer) is sent to customer giving details such as RSP, base value, discount and discounted value etc.

4.2.7 User Configuration & User Rights

BOS uses security for User and attendant to restrict access to its applications.

System maintains the available Users and associated attendant rights levels, and the Setup Utility maintains the available Users and associated User rights.

User can add/edit staff and their roles.

Default Roles

- i. Admin
- ii. LIOC
- iii. RO User

Under RO operation User rights different Profile having user rights can be created. As per LIOC requirements following access rights will be provided to the different profile users:

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No	Heading	Menu	Sub-Menu/Description	Admin	LIOC User	Manager	Dealer	Attendant	
1.	RO Configuration	RO Details		Yes	Yes	No	No	No	
		Products		Yes	Yes	No	No	No	
		Tank		Yes	Yes	No	No	No	
		DU		Yes	Yes	No	No	No	
		DB Maintenance		Yes	Yes	No	No	No	
		Automation assets		Yes	Yes	No	No	No	
		Device		Yes	Yes	No	No	No	
2.	DU Status	GUI		Yes	Yes	Yes	Yes	Yes	
3.	Tank Status	GUI		Yes	Yes	Yes	Yes	Yes	
4.	Live Status	RO Live Status		Yes	Yes	Yes	Yes	No	
5.	RO Operations	Tank truck receipt Entry		No	No	Yes	Yes	No	
		Shift management.		Yes	Yes	Yes	Yes	No	
		Shift Configuration		Yes	Yes	Yes	Yes	No	
		User Configurations		Yes	Yes	No	Yes	No	
		User Rights		Yes	Yes	No	Yes	No	
		Price Schedule		Yes	Yes	No	Yes	No	
		HOS		Yes	Yes	Yes	Yes	No	
		Density Register		Yes	Yes	Yes	Yes	No	
6.	Inter Locking	Configuration	No ATG No Fuelling,	Yes	Yes	No	No	No	

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				Low Tank Level, High Water Level, Product Decantation, Non Entry of TT Receipt, NPND & Testing						
	7.	Alarms	Dash Board		Yes	Yes	Yes	Yes	Yes	
			Configura tion		Yes	Yes	No	No	No	
	8.	Reports	Standard Report	Daily sales	Yes	Yes	Yes	Yes	Yes	
				Shift Report	Yes	Yes	Yes	Yes	Yes	
				Product reconcili ation	Yes	Yes	Yes	Yes	Yes	
				Auto Inventory Point	Yes	Yes	Yes	Yes	Yes	
				Field officer Inspectio n report	Yes	Yes	Yes	Yes	Yes	
				Tank Truck Receipt Entry	Yes	Yes	Yes	Yes	Yes	
				Tank Inventory	Yes	Yes	Yes	Yes	Yes	
				Transacti on Report	Yes	Yes	Yes	Yes	Yes	
				Product Price Change	Yes	Yes	Yes	Yes	Yes	
				Alarm History	Yes	Yes	Yes	Yes	Yes	

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				Dispenser Reconciliation	Yes	Yes	Yes	Yes	Yes	
				EOD report	Yes	Yes	Yes	Yes	Yes	
				DU Totalizer report	Yes	Yes	Yes	Yes	Yes	
				TT in transit report as per SAP inputs	Yes	Yes	Yes	Yes	Yes	
				Preset V/s Actual delivery	Yes	Yes	Yes	Yes	Yes	
				Density Report	Yes	Yes	Yes	Yes	Yes	
				Transaction Receipt print	Yes	Yes	Yes	Yes	Yes	
				Details of Transaction during TT Decantation	Yes	Yes	Yes	Yes	Yes	
			Other Report	Customised Report	Yes	Yes	Yes	Yes	Yes	
				Equipment up/down time report	Yes	Yes	Yes	Yes	Yes	
				Loyalty Transaction Report	Yes	Yes	Yes	Yes	Yes	
				Pump & Nozzle wise transacti	Yes	Yes	Yes	Yes	Yes	

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9.	Trends		on sales						
			Attendant Sales Total	Yes	Yes	Yes	Yes	Yes	
			Tank Wise Reconciliation Report	Yes	Yes	Yes	Yes	Yes	
			Dispenser sales total	Yes	Yes	Yes	Yes	Yes	
			Product sales total	Yes	Yes	Yes	Yes	Yes	
			User Activity report	Yes	Yes	Yes	Yes	Yes	
			Amount Wise sales	Yes	Yes	Yes	Yes	Yes	
			Quantity wise sales	Yes	Yes	Yes	Yes	Yes	
			Attendant wise sales	Yes	Yes	Yes	Yes	Yes	
			Equipment up/down time profile	Yes	Yes	Yes	Yes	Yes	
			Product wise stock loss/Gain	Yes	Yes	Yes	Yes	Yes	
			Product Inventory (Current time)	Yes	Yes	Yes	Yes	Yes	
			Pump & Nozzle wise sales	Yes	Yes	Yes	Yes	Yes	

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				Line Chart						
				Month wise sales	Yes	Yes	Yes	Yes	Yes	
				ATG V/s Invoice	Yes	Yes	Yes	Yes	Yes	
				Stock Reconciliation	Yes	Yes	Yes	Yes	Yes	
				UPS Details	Yes	Yes	Yes	Yes	Yes	
				MOP Wise sales	Yes	Yes	Yes	Yes	Yes	
				Total transaction v/s Sales	Yes	Yes	Yes	Yes	Yes	
				Tank wise sales	Yes	Yes	Yes	Yes	Yes	

Depending on the profile, the Users will be able to access various functionalities of BOS application.

4.2.8 Shift Management

The system provides shift control functionality that enables Shift close & open option as per retail outlet requirement.

The RO personnel can create as many shifts as required within a day. Shift changing is to be done in shift control menu of BOS by authorized users.

When end of day is performed, the active shift will also be closed automatically and new shift will start.

LIOC business process provides mandatory end of day at 23.58 hrs. System will close the shift automatically at 23:58 hrs every day (Auto Shift Closure), irrespective of any fuelling condition. On completion of Auto Shift Closure process, it should automatically open a new shift at 00:00 hrs with all DUs in the same state of operation as at 23:58 hrs. The last shift of the day will be closed at this time and a new day and shift will be opened without any manual intervention.

A Shift Change will capture totalizer of all DUs and tank inventory data from the FCC. This procedure will end the current shift, and start a new shift. The stored data is used to generate wet stock reports wrt Shift.

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	Operation philosophy of Shift at the RO - Shift Definition, Shift Opening & Closing being managed by RO for its routine operation on BOS. If, a transaction is ongoing at the time of scheduled EOD i.e., at 23:58 hrs, then same will be considered in next shift & current shift will be closed forcefully taking last known totaliser reading of that particular fueling position for shift accounting purpose. Such transaction shall be accounted in the next Shift. Thereafter, new shift shall be opened by the System automatically. DU can be added / removed while changing the shift. Tank can be disabled (if not in service) while changing the Shift.
4.2.9	Product Pricing Schedule Each Product in the System must have a price assigned and a Product may have a different price for each of the different operating schedules The application provides an interface to setup Product prices; there are two options provided for price change i.e. instant Price change & Scheduled price change. Editing Product Prices The Product prices for each of the operating schedules can be configured from the Price Schedule page. Procedure: - Select the Product and key in New Price, - Select the Scheduled date & time, - Update Price. These price changes can be scheduled to occur after predefined time without the presence of the RO personnel. The system should also accept & implement the prices as communicated from HOS. This communicated price would overwrite the existing prices in the System. A price push acknowledgement should flow back to the HOS as soon as prices are updated in the FCC, as per a defined protocol for real time communication with LIOC Server. Price change history data can be obtained using the Historical Price Changes report.
4.2.10	Tank Truck Receipt Entry Tank truck receipts are recorded in BOS as follows: Forecourt controller will automatically detect tank receipts from ATG console

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and Challan quantity will be used for wet stock reconciliation.

2. However Receipt details as per Invoice can be entered manually through GUI.

BOS application option provides the Tank Receipt to enter the Tank Truck receipt details. Select the 'Receipt' item in the console menu to open the Tank Receipt.

The following business process has been implemented for tank truck receipt:

1. Tank Truck arrives at Retail Outlet.
2. Tank Truck starts unloading product.
3. Tank truck completes unloading. (15-20 minutes operation).
4. Receipt of "N "Litres detected by Forecourt controller through ATG.
5. Forecourt controller detects receipt data immediately after completion of tank truck unloading through ATG console. Timer for Manual Entry Alarm starts here.
6. If Manual Entry details are not done into the Back office application of receipt, alarm is generated by the system in 30 minutes of time.
7. Forecourt controller will allow sales from the connected nozzles without manual entry of TT receipt for maximum 6 hours (configurable downwards only) from the time of receipt completion.
8. If the manual entry is not done within 6 hours from the completion of tank truck receipt, fuelling positions connected to the tank will be locked by the controller. Lock will be automatically removed once the manual entry is done by the RO personnel.
9. While doing manual entry, user will be able to select the respective receipt against which entries are to be made. For example, if there are multiple receipts available for manual entry a GUI will be provided for user to select the respective entry. The system shall have provision to enter short receipt if any recorded on Challan (As per standard SOP for shortage booking). While generating Reports, System will take into consideration the Quantity = Challan Quantity - Shortage (if any). A pop up message to be provided for confirmation of shortage acknowledged by transporter when the dealer enters TT receipt quantity in the system.
10. As soon as chamber is decanted in the underground tank, ATG console will create delivery and same shall also be populated in the BOS PC "Stock Received but pending to be Entered".

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11. Dealer will enter the received quantity (SAP invoice quantity after adjusting for shortage received on invoice, if any) against the relevant deliveries created by the ATG Console.
12. System should not allow any modification or editing once the TT received has been entered in the system.
13. System will not allow entry of received quantity if the received quantity is beyond the permissible range (default value of +/- 4% of tank capacity). An alarm will be generated for all such cases where the difference between the received quantity and quantity detected by ATG console is beyond the permissible limits.

4.3 Prepay & Post pay Transaction marking at Retail Outlet

Prepay

Prepay is a condition where transaction to be made is already decided in advance by the RO user. Such a scenario may also come under self fuelling conditions or at odd hours when dealer has decided for only preauthorised transactions.

In this RO user will preset the DU with transaction type (Cash, Credit Card or LIOC Loyalty Transaction) as per following sequence in EDC:

- a. Select the transaction type
- b. Select the product
- c. Select Pump No
- d. Select preset Amount/Quantity
- e. Process the payment & LIOC loyalty transaction (if any)
- f. Click on continue and this un-delivered prepaid transaction is pushed to ITPS which will trigger HOS for sending this transaction to concerned RO and authorize the concerned DU display.
- g. Under proposed RA system FCC shall be continuously pinging HOS at regular intervals (10 to 15 sec), during such sessions the triggered transaction shall flow to concerned FCC and will authorized the DU for delivery of desired product.
- h. The time slot for which concerned DU will remain authorised is to be kept as 10 minutes (configurable)

Post Pay

Post pay is a condition when payment and loyalty transactions are processed at the EDC machines post delivery of fuel to the customer.

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5	Chapter 5: Alarms Reports and Interlocks																												
5.1	Alarm Dash Board Alarm Dash Board provides list of all equipments related alarms & their duration. Once the alarm is normalized alarm automatically disappears from Alarm Dash Board.																												
5.2	Alarm Configuration List of Alarms available in system are as given below. Configuration of alarms with its trigger values can be configured on the site as per site requirements. List of alarms available: <table><tr><th>Device</th><th>Name</th></tr><tr><td>ATG</td><td>ATG Product High</td></tr><tr><td>ATG</td><td>Water Level High</td></tr><tr><td>ATG</td><td>Low Product Level</td></tr><tr><td>ATG</td><td>ATG Struck</td></tr><tr><td>ATG</td><td>ATG Equipment Communication Failure</td></tr><tr><td>ATG</td><td>ATG Console Communication Failure</td></tr><tr><td>ATG</td><td>Product Receipt in Tank in progress</td></tr><tr><td>DU</td><td>Pump Communication Failure</td></tr><tr><td>EDC</td><td>EDC Communication Failure (To be generated by ITPS won't be available In FCC)</td></tr><tr><td>DU</td><td>Preset Validation against actual delivered quantity</td></tr><tr><td>Connectivity</td><td>No connection to HOS Server</td></tr><tr><td>Connectivity</td><td>No connection to ITPS Server</td></tr><tr><td>Connectivity</td><td>No connection to Vendor's server</td></tr></table>	Device	Name	ATG	ATG Product High	ATG	Water Level High	ATG	Low Product Level	ATG	ATG Struck	ATG	ATG Equipment Communication Failure	ATG	ATG Console Communication Failure	ATG	Product Receipt in Tank in progress	DU	Pump Communication Failure	EDC	EDC Communication Failure (To be generated by ITPS won't be available In FCC)	DU	Preset Validation against actual delivered quantity	Connectivity	No connection to HOS Server	Connectivity	No connection to ITPS Server	Connectivity	No connection to Vendor's server
Device	Name																												
ATG	ATG Product High																												
ATG	Water Level High																												
ATG	Low Product Level																												
ATG	ATG Struck																												
ATG	ATG Equipment Communication Failure																												
ATG	ATG Console Communication Failure																												
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Connectivity	No connection to HOS Server																												
Connectivity	No connection to ITPS Server																												
Connectivity	No connection to Vendor's server																												
5.3	Interlocking configuration System provides different interlocking options as per LIOC requirement.																												
5.3.1	ATG equipment communication failure (No ATG No Fueling)																												

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In case of ATG Equipment communication failure and ATG console communication failure for a continuous period of 180 seconds the connected DU / nozzles will be locked by the Automation system. Once ATG communication and ATG console communication is restored, then the connected DU / Nozzles shall get automatically unlocked.

This interlock should be feasible for enabling / disabling tank wise for ATG probe communication failure.

This setting is configurable for enable / disable and by default it will be enabled. LIOC user can deactivate it whenever required.

5.3.2 No Print No Delivery (NPND)

NPND functionality will be available in Automation Software. In which integrated printers (Integrated DU printers, if any) will be interlocked with the DU delivery. Delivery shall not commence for next transaction if print out is not taken for the last transaction.

- The automation system should enable “Print Out” of the completed transaction from the respective DU Printers for carrying out the next transaction.
- Once a DU has been defined to operate under this concept, the System shall not authorize the DU for next transaction irrespective of DU printer out of paper, or printer itself is out of order.
- Along with making of entry of vehicle number, there shall be provision to enter Mobile Number of customer also, if facility is available with DUs

The NPND configuration should be enabled for a threshold amount or quantity as selected, which is configurable under LIOC user profile.

There shall be provision to enable/disable this interlock fuelling position wise.

This setting is configurable and by default it will be enabled. LIOC user can deactivate it whenever required through HOS. Such feature is subject to DU protocol.

5.3.3 Tank Truck Entry Missing Interlock

In case a delivery is detected in FCC/BOS and if invoice entry is not done by the RO user within 6 hours (configurable downwards as per LIOC requirement) from the time of completion of tank truck receipt, fuelling positions connected to the tank will be locked by the FCC. Lock will be automatically removed once the invoice entry is done by the RO personnel.

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	This setting should be configurable for enable or disable tank-wise and by default it will be enabled. Before decanting the TT, it is mandatory for the dealer to prepare the serially numbered TT decantation check list jointly signed by dealer and TT driver. Dealer will be required to update the serial number of the prepared list before entering the TT Details in the system.
5.3.4	Tank Water Level High Interlock If the High Water Level Alarm (at water level of 50mm irrespective of Tank capacity) is generated by ATG System fuelling positions connected to the tank will be locked by the controller. Lock will be automatically removed once the water level comes back to normal after removing water from tanks. This water level setting should be configurable tank-wise. The interlock enabling/disabling should be configurable tank-wise. By default this interlock should be in enabled state.
5.3.5	Tank Product Level Low Interlock When the tanks product goes below low level (350 mm, configurable as per site requirements) Low Product Level Alarm is generated by ATG System & fuelling positions connected to the tank will be locked by the controller. Lock will be automatically removed when Product level reaches above low level. This product level setting should be configurable tank-wise. The interlock enabling/disabling should also be configurable tank-wise. By default this interlock should be in enabled state.
5.3.6	Dispenser Testing Interlock The testing is envisaged to be carried out through authorizing DU with a Testing Tag reader. Such Transactions when authorized through a testing tag reader shall automatically be marked as Testing. Respective Nozzles will be locked by the Automation System, if Testing for the Nozzle has not been marked within validation of 5Ltr within the defined time (10:00 hrs) which should be configurable downwards. Testing Interlock should be enabled by default. The said nozzle shall be locked for any further fuelling except for Authorized Testing Transactions. Lock will be removed as soon as transaction of 5Ltr is carried out against the nozzle which is authorized for testing. The system will automatically

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	register this transaction as Testing. In cases, wherein authorized 5 liters testing transaction and delivered quantity against this authorization is other than 5 liters, then the System would consider such transactions also as testing for record. However, the nozzle would remain locked. System would continue to allow Authorization for the next testing transaction and the nozzle would be unlocked only when 5 liters transaction is affected. This acceptable value of "5 Liters" to unlock the nozzle should be configurable to meet requirements of any future changes in Weights & Measures guidelines, if any.
5.3.7	Preset Vs Actual Delivered quantity at the RO In case there is difference between Preset and Actual Delivered quantity, then in Alarm Dashboard, a message will pop up for at least 10 minutes. This alarm will be available in Alarm dashboard of BOS GUI. Under this event, the concerned nozzle would be blocked for further deliveries. This interlock would be configured for enabling/disabling from the Dealer log in. This feature is based on the dispenser protocols which provide this information. If DU protocol doesn't provide this Preset information then for those DU this function is not applicable.
5.3.8	TT Decantation Interlock Alarm While TT decantation is in process, the nozzles connected to the concerned tank will be locked for any fuelling transaction. All the nozzles will be unlocked for fuelling transaction as soon as TT decantation is completed. This interlock shall be configurable tank-wise and by default would be set as enabled. Note: Reason for Interlock of DUs should be shown as a mnemonic for easy analysis and understanding of RO User.
5.4	Reports
5.4.1	Standard Reports 1. Daily Sales Report 2. Shift Report 3. Stock Reconciliation Report 4. Inventory Report 5. Field Officer Inspection Report 6. Tank Truck Receipt Report 7. Transaction Report 8. Product Price History Report 9. Alarm History Report 10. Dispenser Reconciliation Report

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	11. EOD Push Status 12. UPS Report 13. DU Log Reports Preset Vs Actual Delivery Exception Report
5.4.2	Other Reports 1. Customized Report 2. Equipment up Time Report 3. LIOC Loyalty transactions Report 4. DU/Nozzle Wise Sales Report 5. Attendant Sales Total Report 6. Tank Wise Reconciliation Report 7. Product Sales Total Report 8. Transaction Type/MOP Sales Report 9. User Activity Report
5.5	Trends
5.5.1	Amount & Volume Wise Sales Profile • Number of Transactions on Y axis and Amount slabs on X axis • Number of Transactions on Y axis and Volume slabs on X axis The report should be available for “from date-time - To date - time”.
5.5.2	Attendant Wise Sale Generated trend of Attendant wise sale The report should be available for “from date-time - To date - time”.
5.5.3	DU Utilization (Automation Vs Manual) Generated trend of Nozzle Utilization The report should be available for “from date-time - To date - time”.
5.5.4	Exceptional Stock Variation Generated trend of Exceptional stock Variation The report should be available for “from date-time - To date - time”. Generated trend of Shift wise Exceptional stock Variation report The report should be available for “from date-time - To date - time”.
5.5.5	Product Wise Stock Loss/Gain Generated trend of Product wise & Tank wise stock Loss/ Gain

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	The report should be available for “from date-time - To date - time”.
5.5.6	Product Inventory at Current Time Generated trend of Tank Inventory The report should be available for “from date-time - To date - time”.
5.5.7	Pump & Nozzle wise sales Generated trend of Pump & Nozzle wise sales The report should be available for “from date-time - To date - time”.
5.5.8	Monthly sales (All Product) Generated trend of productwise daily and Monthly sales Apart from standardized daily / monthly sales report, the sales trend report should be available for “from date-time - To date - time”.
5.5.9	ATG Vs Invoice Receipt Generated trend of tank wise and product wise ATG Receipt vs Invoice Receipts The report should be available for “from date-time - To date - time”.
5.5.1 0	Stock Reconciliation Generated trend of daily and monthly stock reconciliation The report should be available for “from date-time - To date - time”. Note: The health of Automation is presently covered in HOS through five basic reports. For acceptance of successful Automation commissioning, these five basic reports (Product wise - Tank and Nozzels Sales comparison, Product wise - RDB vs HOS Mapping of Tank and Nozzels, Software version, no of Automated Bills issued vs no of transactions product wise, Interlock Status) at the HOS should be correctly generated for a period of 15 days.
6	Chapter6: Additional Automation System Features Following are the additional Automation features required to be developed & implemented in system based on requirements from LIOC:
6.1	Totaliser reading after every transaction FCC will capture DU Totaliser reading after every transaction.
6.2	Auto Inventory Point (AIP) and Half Hourly Reconciliation

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Inventory points will be automatically generated by the system on clock half hourly basis.

DU totaliser reading and tank inventory will be collected by FCC without stopping fuelling operation. If any dispenser is under fuelling during AIP process, totaliser reading of last known transaction for the DU will be captured.

System is capturing DU totaliser reading with every transaction and ATG reading at every minute. In case DU is not communicating at the time of AIP - Last known DU's totalizer reading is to be considered with remarks viz. time stamp of communication failure.

Stock reconciliation reports will be available based on the hourly AIP without any dependency on shift timings. It shall be noted that as the system does not stop dispensing during AIP, variances might occur due to this limitations.

6.3 ATG Float Struck & Receipt commenced Alarm

FCC captures ATG data at regular interval of 60 seconds. Based on this data, it generates alarms, in case:

a) The connected nozzle(s) are dispensing fuel and there is no change in the ATG level, ATG float may be stuck up.

b) The connected nozzle(s) are dispensing fuel and there is increase in the ATG level, then the receipt of product has commenced.

7 Chapter 7: Technical Specification

7.1 Forecourt Communication Controller Specifications

Forecourt controller - Combo System: To have separate module for FCC and separate module for BOS housed in single enclosure

No	Description	Solid State based FCC Specification
1	Make & Model	Approved by LIOC
2	Processor for FCC	Industrial grade processor with Minimum 1 GHz (-40 to +85 degree)
3	RAM for FCC	1.0 GB with ECC (error check & correct)
4	FCC flash for FCC	1 lakh endurance (Read & Write) Should be able to hold minimum 100000 transactions
5	Flash & RAM for FCC	ECC error check & correct

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6	Processor for BOS	Industrial grade processor with Minimum 1.2 Ghz (-40 to +85 degree)
7	RAM for BOS	2 GB Industrial Grade (-45 to 85 degree)
8	Memory for BOS	16 GB Minimum. Industrial Grade (-45 to 85 degree) Should hold minimum 1 year data
9	Operating System	Embedded operating system meeting Real Time Operating requirement with user friendly front end GUI for reports generation and other functionalities of BOS (shift closing etc). Automation application should be a web based application and accessible on all common web browser.
10	System Response	The FCC with built-in BOS functionalities with stored data of transactions, events and alarms of 1 year must have acceptable System response, as defined below – a. Manual Shift closure - Maximum 45 sec. b. DSR generation for a Month - Maximum 1 min. c. FOIR generation between any two shifts - Max. 1 min. d. All Other reports - Maximum 1 min. e. System start up - < 3 sec
11	Communication standard compatibility for Interface Electronics	RS 485, RS 422, RS 232, Current Loop, Tokhiem standard, TCP/IP for integration of Petroleum Product Dispenser and Tank Gauging System.
12	Operating Temperature	0°C to + 55°C
13	Relative Humidity	5% to 95%, Non-condensing.
14	LAN Port	Min 1 no. onboard 10/100 Base-T Ethernet using TCP/IP
15	Approvals	FCC / UL / CE - Detailed test report / certificate in support of these approvals are to be submitted.

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16	Interfaces required to integrated devices directly to FCC or through LAN	1) Loyalty Point EDCs (As available at ROs) 2) ATG Console Minimum one (if provided) 3) Printer (As available at ROs)* 4) Dispensing Units (As available at ROs)* 5) Communication devices (Router/ Modem) using GSM / CDMA/V-SAT / ADSL Router Broadband etc. for connecting to Internet. Minimum one* 6) Payment EDCs (As available at ROs)
	17 Other Ports	One VGA Port - Monitor One HDMI Port - for connecting LCD display Minimum one USB 2.0 for backup devices
	18 Input Power Supply	230 V AC /230 V AC through DC power supply
	19 Input / output devices	Keyboard (physical/virtual), Mouse, VGA Monitor and Desk Jet Printer (as per specification provided)
	20 Power Management	FCC Should have an inbuilt power management board with suitable Li-Ion battery for giving 30 minutes power backup to FCC, in the event of power failure. Such Power management board should also provide provision of DC Power output for powering on Router. For avoidance of doubt, 30 minutes power backup shall be available for FCC & Router.
21	Audio/Visual indication	FCC should have front panel LED indications for : 1. Mains Input 2. Battery Input 3. Low Battery 4. No Battery 5. TX & RX for forecourt communication interfaces FCC should also give audible alarm for : 1. Switching On battery 2. No Battery 3. Low Battery 4. Configurable Audio alarm support for all or any software related alarms

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	22	Power Management Board Interface with FCC	FCC power management board should be interfaced with FCC for capturing following power related events: 1. Mains Input Failure 2. Low Battery 3. Battery Charge 4. Load on battery																		
	23	Housing and Enclosure Digital Lock: (Pin based/ Biometric/RFID/ Password/OTP)	FCC & BOS hardware along with power management board, battery, interface modules, etc. should have it's own enclosure and all the other interfacing hardware like Router for VSAT/BB etc., should be housed inside a wall mount enclosure along with such FCC box. Enclosure provided along with digital lock, exhaust FAN and dust filter. Digital lock must be integrated with FCC.All events like door open/close events with user details must be recorded as an event in FCC software and must be available in report format.																		
7.2	Back office system Specifications <table><tr><th colspan="3">Back Office System</th></tr><tr><th>No</th><th>Description</th><th>Specification</th></tr><tr><td>1</td><td>Keyboard</td><td>USB, English Qwerty Keyboard (Min 104 keys) (Wired)</td></tr><tr><td>2</td><td>Mouse</td><td>USB, Two Button Optical Scroll Mouse (Wired)</td></tr><tr><td>3</td><td>Monitor</td><td>18.5" (or bigger) TFT Monitor. VGA cable of sufficient length to be provided (should be of minimum 3 meter length.) Make: LG/AOC/Acer/Samsung</td></tr></table>			Back Office System			No	Description	Specification	1	Keyboard	USB, English Qwerty Keyboard (Min 104 keys) (Wired)	2	Mouse	USB, Two Button Optical Scroll Mouse (Wired)	3	Monitor	18.5" (or bigger) TFT Monitor. VGA cable of sufficient length to be provided (should be of minimum 3 meter length.) Make: LG/AOC/Acer/Samsung			
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7.3	ATG Probe Specifications <table><tr><th colspan="3">Automatic Tank Gauging System Specifications</th></tr><tr><th>No</th><th>Description</th><th>Specification</th></tr><tr><td>1</td><td>Make</td><td>OPW,StartlItaliana , VeederRoot,FranklinFueling,SBElectromechanical,Omantec</td></tr><tr><td>2</td><td>Tank Probes</td><td>Magnetostrictive</td></tr><tr><td>3</td><td>Inventory Measurement</td><td>For underground tanks with petroleum products like Petrol, Diesel</td></tr><tr><td>4</td><td>Lengths</td><td>As be applicable as per tank diameter</td></tr></table>			Automatic Tank Gauging System Specifications			No	Description	Specification	1	Make	OPW,StartlItaliana , VeederRoot,FranklinFueling,SBElectromechanical,Omantec	2	Tank Probes	Magnetostrictive	3	Inventory Measurement	For underground tanks with petroleum products like Petrol, Diesel	4	Lengths	As be applicable as per tank diameter
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	5	Outside diameter of Tank Probe portion inside tank	2" - 3" (capable of getting installed in an opening of 3" on the tank)	
	6	Automatic calibration	Ability to automatically calibrate system with tanks directly or through FCC	
	7	Communication Ports	minimum 1 connection port for FCC	
	8	Accuracy (Leak detection)	1 LPH in-tank leak detection	
	9	Min. level accuracy	+/- 0.9 mm	
	10	Repeatability (Min.)	+/- 0.14 mm for entire length of probe	
	11	Temperature accuracy	+/- 0.3 Deg. C	
	12	Ingress Protection (Including canister / probe head)	IP - 68 (Vendor to ensure suitability of the entire probe for working under water submerged condition in underground chambers. Same shall be fully covered under vendor's scope	
	The probe should be suitable for use in underground petrol, diesel and gasohol (petrol with upto 20% ethanol) tanks.			
7.4	Surge Protection Device Specifications			
Surge Protection Device				
No	Description	Specification		
1	For Single Phase Application Surge Protection Device for Single Phase system:	Class B+C/Type 1+2 (according to IEC 61643 - 11) - Handling Lightning Surges of 10/350 μ S waveform and Switching surges of 8/20 μ S waveform. 1 no. pluggable type SPD of Metal Oxide Varistor arresters within built thermal disconnect has to be connected between Line and Neutral and 1 no. of Spark Gap type SPD has to be connected between Neutral and Earth of the following ratings should include base element & pluggable arresters.		
2		Line to Neutral	Neutral to Earth	
3	Type	MOV with built in thermal fuse	Spark Gap Encapsulated / Non-exhausting	
4	Maximum Continuous Operating Voltage, Uc	320 Volts	255 Volts	

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	5	Nominal Discharge Current In	20 kA (8/20 μsec)	20 kA (8/20 μsec)	
		Maximum Discharge Current I _{max}	40 kA (8/20 μsec)	40 kA (8/20 μsec)	
	6	Lightning Impulse Current	7 kA (10/350 μsec)	12 kA (10/350 μsec)	
	7	Voltage Protection Level	< 1.3 kV	< 1.2 kV	
	8	Response Time	< 25 nano seconds	< 100 nano seconds	
	9	Operating temperature range	-40° C to +80° C		
	10	Mounting on	Din Rail		
	11	Degree of Protection	IP20		
	12	Max. Back-up fuse	160 amps max.		
	13	Visual Indication of the mechanical flag in the surge arrester (Line to Neutral):			
		Healthy (condition)		Green Colour	
		Faulty (condition)		Red Colour	
		Potential free Changeover			
	Healthy (condition)		Potential contact should be in NO mode.		
	Faulty (condition)		Potential contact should be in NC mode.		

7.5	Contactor Specifications		
	Specification of Contactor The contactor should be complying with the below specifications.		
	No	Description	Specification
	1	Rated operational Voltage U _e	<=690 V AC 25...400 Hz for power circuit
	2	Rated operational Current I _e	20 A (<= 60 °C) at <= 440 V AC AC-1 for power Circuit
	3	Control circuit type	AC 50/60 Hz
	4	Control circuit voltage	220 V AC 50/60 Hz220 V AC 50/60 Hz
	5	Auxiliary contact composition	1 NO + 1 NC
	6	Rated impulse withstand voltage	Rated impulse withstand voltage

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	7	Rated making capacity , Irms	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1
	8	Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
	9	Rated short-time withstand current	105 A <= 40 °C 10 s power circuit 210 A <= 40 °C 1 s power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 30 A <= 40 °C 10 min power circuit 61 A <= 40 °C 1 min power circuit
	10	Average impedance	2.5 mOhm at 50 Hz - lth 25 A for power circuit
	11	Mounting support	Plate Rail
7.6	Mounting Box Specifications		
	Specification of mounting box		
	No	Description	Specification
	1	Width	Min 254 mm
	2	Length	Min 180 mm
	3	Height	Min 111 mm
	4	Inner height	Min 97 mm
	5	Base	Polycarbonate, glass-fibre reinforced
	6	Cover Material	Transparent
	7	Sealing Material	Polyurethane
	8	Cover screw Material	Polyamide 6 and fibreglass Reinforced
	9	Ingress protection	IP66 - acc. EN 60529 / DIN VDE 0470-1
	10	Impact resistance	IK08 acc. DIN EN 5012 / VDE 0470 segment 100
	11	Protection class	II - isolate protection acc. VDE

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		0106
12	Rated insulation voltage AC	690V V
13	Heavy metals-free	Yes
14	PVC-free:	Yes
15	Silicone-free	Yes
16	Ambient temperature (max.)	80 °C
17	Ambient temperature (24 h)	60 °C

RF Master(Radio Frequency Slave for Wireless Communication with FCC)

SN	Item Description	Specification
1	Operating Frequency	FREE ISM BAND
2	Output Power	Minimum 20 DBm With Integrated LNA
3	High RX sensitivity	(-104 DBm)
4	DATA rate	Min 250 KHz
5	Compatibility	IEEE® 802.15.4 compliant Transceiver Mesh networking capability Worldwide license-free operation
6	Interface Port	1 Nos. RS485 to Interface with FCC-BOS
7	Operating Power	5V DC +/- 20% @200mA
8	Mounting	Wall Mounted / Inside enclosure box
9	Protection	IP67
10	Communication Range	Minimum 150 meter with slave module
11	Input Voltage Range	150 – 280 V AC at 40- 60 Hz

Note: RF master module at sales room to be installed in front of Sales room depending on RO size and FCC mounting Location. This device should be with IP67.
OR
RF master Module should be kept inside the sales room near FCC.

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RF Salve (Radio Frequency Slave for Wireless Communication with DUs)

SN	Item Description	Specification
1	Operating Frequency	FREE ISM BAND
2	Output Power	20 DBm With Integrated LNA
3	High RX sensitivity	-104 DBm
4	DATA rate	Min 250 KHz
5	Compatibility	IEEE® 802.15.4 compliant Transceiver Mesh networking capability Worldwide license-free operation
6	Interface Ports – MIN 3no	1 Nos. RS485/CL for DU interface 1 Nos. RS485 For Printer Interface 1 Nos. RS485 for DU/Tag reader
7	Operating Power	150 to 280V AC @40-60Hz
8	Output Power	5VDC @ 200mA to power up tag reader
9	Mounting	Wall Mounted / DU side panel/ Inside DU Panel / Pole mounted
10	Protection	IP67
11	Internal Memory	Minimum 5000 Transaction storage.
12	MOC	ABS fire retardant V0 grade
13	Communication Range	Minimum 150 meter with master module
14	Networking & Compatibility	Capable of connecting up to 16 DUs of same make. And module shall be in network
15	In built Battery backup	Battery backup for real-time clock with shelf life of ten years.

HOS cloud hosting minimum requirements

- 16 GB Ram
- 4 Core Processor
- 200 GB Hard Disk with 6 Months Data Backup and 3 months live data for 100 ROs.
- 50 user login needs to be provided to LIOC.

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ANNEXURE-III

DOCUMENTS TO BE ENCLOSED

(Documents to be filled up, signed, and enclosed)

1. Pre-Qualification Criteria of Tenderers:

Following documents for meeting the pre-qualification criteria should be enclosed by the tenderer along with offer otherwise their offer may be rejected : -

- I. Average Annual Financial Turnover during the last 3 FY ie 2015-16, 2016-17 and 2017-18 shall be at least **LKR 87.6 Mil (USD 488,922)** (30% of estimated value). In case of non-submission of balance sheet for any particular FY, the same shall be considered as ZERO for computation of avg. Turn Over. The balance sheet shall be audited by a Chartered Accountant wherever required as per the rule of the Land.

Audit Balance Sheet Criteria:

Audited balance sheet and Profit & Loss account for the last 3 (three) financial years. Average annual financial turn over during the above mentioned period should be as follows Item-wise:

Audit Balance Sheet during last 03 (Three) years (Copies shall be enclosed)	Cumulative Credential Value for last 03 (Three) Years in LKR or equivalent foreign currency.
(A.)Financial Year 2015-16	
(B.)Financial Year 2016-17	
(C.)Financial Year 2017-18	
Average annual financial turn over =(A+B+C)/3 (In Sri Lankan Rupee or equivalent Foreign currency)	

In any case that the foreign bidders have provided annual turnover information in foreign currencies, they will be converted into Sri Lankan Rupees using approximate Indicative Exchange Rates published by Central Bank of Sri Lanka as on the date of opening of Technical Bid.

Average annual financial turn over (In Sri Lankan Rupee or equivalent Foreign currency)	Average Annual Financial Turnover shall be at least LKR 87.6 Mil (USD 488,922)
--	---

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II. Bidder should have supplied and installed all the tendered items to any authority/Gas or Fuel stations/refinery/Petroleum Terminal or any other user during the past five years ending 31st Dec'2018. Values shall be as per following.

- a. 3 similar work orders each of value not less than LKR 233.6 Mil (USD 1,303,790/-) OR
- b. 2 similar work orders each of value not less than LKR 146.0 Mil (USD 814,869/-) OR
- c. Single similar work order of value not less than LKR 116.8 Mil (USD 651,895/-)

Definition of similar works:

- Bidder shall be a manufacturer of DU Automation Equipments or their authorized agent / authorized importer/ authorized distributor/ authorized dealer.
- Bidder should have supplied and installed all the tendered items to any authority/Gas or Fuel stations/refinery/Petroleum Terminal or any other user.

The bidder should also submit the following statement with documents in support of their Credential.

S. No.	Order nos. & date(with copies of purchase orders)	of Receipted challan / certificate of execution / GRN / Excise Invoice / Tax Invoice / Consignment Note etc. as a proof of supply (with copies of the same).	Item description with specification	Credential Value - Completed PO/ Contract in LKR or equivalent foreign currency.
1				
2				
3				

Credential for completed various “similar works” or contract(s) as stated above for each work / contract during last five (5) years to any Petroleum company/refinery/petrochemical industries/any other user / organization, which should be substantiated by producing PURCHASE ORDER copy along with any one or more of the following documents:

- i) Work Order/Delivery Note/Invoice
 - ii) Contract Agreement.
 - iii) Certificate of Execution/ GRN / Consignment Note
 - iv) Work Completion certificates / SAT reports
 - v) Bill of Lading/Air-way Bill (For Foreign Bidder)
 - vi) Customs Shipping Bill of Export (For Foreign Bidder)
 - vii) Custom Bill of Entry (For Foreign Bidder)
- etc. as a proof of successful completion of works as required by the tender issuing authority.

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III. Availability of Business Registration and VAT registration certificates.

IV. Vendor should have a company registered in Sri Lanka or should have direct/indirect subsidiary company registered in Sri Lanka for the after sales services. In case, if above company registration is not available, vendor shall submit an undertaking stating that, same will be submitted within 35 days from the date of placing of LOI (Letter of Intent). Failing which; EMD will be forfeited.

The tenderers should adequate experience and facility to carry out the said work. The tenderers shall submit all possible documentary evidence and authorization from OEM along with their techno - commercial bid.

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(Documents to be signed and enclosed)

ANNEXURE-IV

DECLARATION OF THE BIDDER

SVP (E), Lanka IOC PLC

I / We have examined carefully, read and understood the above Terms and Conditions, Specifications and General Conditions of Contract. I / We hereby tender and undertake to execute and complete all the works required to be performed in accordance with the Specifications, Bill of Quantities, General Conditions of the Contract and the Terms and Conditions as stated in the Tender and at rates and prices set out in the annexed Bill of Quantities within the time period as stated in the Tender. In the event of our Tender being accepted in full or, in part, I / we also hereby agree that the said Tender, Specifications, Bill of Quantities, General Conditions of Contract and the Terms and Conditions as stated in the Tender together with the acceptance thereof in writing by or, on behalf of the Trustees shall form the Contract. I / We are fully aware of the nature and specifications of materials and my / our offer is for supply of stores in accordance with the requirement of Lanka IOC PLC, Colombo.

I / We have deposited Requisite Earnest Money.

I / We agree that the period for which the Tender shall remain open for acceptance shall not be **less than 120 days**.

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(Documents to be filled up, signed and enclosed)

ANNEXURE-V

BIDDER'S INFORMATION

SVP (E), Lanka IOC PLC

Tender No.	LIOC/ENG/GT/03/2018-19
Name of work/Item Description:	Tender for supply, delivery, installation, testing & commissioning of wireless automation of dispensing units and product tanks at 100 Nos petrol stations of Lanka IOC PLC
Name of the Company:	
Address:	
Contact Person Name:	
Phone:	
Fax:	
E-Mail Address:	
Have you studied the Pre-Qualification requirement of the selected tender?	Yes / No
Is the company registered in Sri Lanka or should have direct/indirect subsidiary company registered in Sri Lanka for the after sales services?	Yes / No
Is the company having Copy of VAT Registration Certificate / CST Registration Certificate (TIN)?	Yes / No
Is the company having Current valid Professional Tax Payment Certificate (PTPC)?	Yes / No
Is the Company meeting the pre-qualifying criteria mentioned in the NIT?	Yes / No
Confirm that you will furnish the documentary evidence against pre-qualification criteria along with your offer.	Yes / No
Are you MANUFACTURERS / authorised dealers/ authorized stockiest/ suppliers for the tendered materials and services ? Please indicate your status.	-----

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[Please strike out the alternative which is not applicable in your case out of the following two and initial the same.]

(a) I / We hereby declare that I / We have not been banned or, de-listed by any Government or Quasi-Government Agency or Public Sector Unit.

(b) I / We hereby enclose the details of any banned / de-listed imposed on my / our agency by any Govt. / Quasi - Govt. Agency or, PSU.

I / We agree to upload the copies of pre-qualification documents as per the Notice Inviting Tender along with our offer. I / We undertake and confirm that in case we do not submit these Prequalifying document with our offer or the documents are not found in order by LANKA IOC PLC / not acceptable to LANKA IOC PLC, our tender shall be liable for rejection.

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(Documents to be filled up, signed and enclosed)

ANNEXURE-VI

DETAILS OF STATUTORY LEVIES FOR SRI LANKAN BIDDERS AND LOCAL AGENTS OF FOREIGN BIDDERS:-

S. NO.	VAT (ONLY IF APPLICABLE)	WHETHER APPLICABLE (If applicable, please state rate in %)	
		YES / NO	In %
1.	(Part A) Supply of Automation hardware & software		
2.	(Part B) Installation and Integration of Automation hardware & software, Testing , Commissioning including SAT		
3.	(Part C) Comprehensive AMC for 2 years after one year warranty.		

Please Note:

VAT SHALL BE APPLICABLE ONLY FOR LOCAL VENDORS AND LOCAL AGENTS, VAT AS APPLICABLE ON THE SCHEDULE OF WORK AT PREVAILING PERCENTAGE SHALL BE PAID TO THEM.

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(Documents to be filled up, signed, and enclosed)

ANNEXURE-VII

TO INDICATE THE DETAILS OF CURRENCNY FOR FORIEN BIDDERS:-

SL. NO.	DESCRIPTION OF SCOPE OF WORK	FORIGN BIDER /AGENCY (Local Agent)	Bid Currency in Notation & Words
1.	(Part A) Supply of Automation hardware & software		
2.	(Part B) Installation and Integration of Automation hardware & software, Testing , Commissioning including SAT		
3.	(Part C) Comprehensive AMC for 2 years after one year warranty.		

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ANNEXURE-VIII

PROFORMA OF DECLARATIONS TO BE FURNISHED BY THE TENDERERS

DECLARATION - 'A'

We declare that we have complied with the Conditions of Contract.

Date :

Place :

**Tenderer's signature
Seal**

DECLARATION - 'B'

We declare that we do not have any employee who is related to any officer of LIOC PLC

OR

We have the following employees working with us who are near relatives of the Officer Director of LIOC

Name of the employee of the Tenderer	Name & designation of the Officer of LIOC

Date :

Place :

**Tenderer's Signature
Seal**

DECLARATION - 'C'

The Tenderer is required to state whether he is a relative of any Director of LIOC or the Tenderer is a firm in which any Director of LIOC or his relative is a partner or any other partners of such a firm or alternately the Tenderer is a private company in which Director of LIOC is a member or Director.

S/N	PARTICULARS	DETAILS
1	Name of the Tenderer and his relations with the Director in LIOC.	
2	Name of the Director of LIOC who is	

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	related to the Tenderer.	
3	Name of the Director of LIOC who is a member or a Director of the firm.	

Date :
Place :

**Tenderer's
Signature & Seal**

DECLARATION - 'D'

Tenderer is required to state whether they have employed any retired Director and above rank officer of LIOC in their firm. If so, details hereunder to be submitted.

S/N	PARTICULARS	DETAILS
1	Name of the person	
2	Post last held in LIOC	
3	Date of retirement	
4	Date of employment in the firm	

Date :
Place :
Seal

**Tenderer's
Signature &**

DECLARATION - 'E'

We declare that we have a company registered in Sri Lanka or should have direct/indirect subsidiary company registered in Sri Lanka for the after sales services. In case, if above company registration is not available with us, we are liable to submit the same within 35 days from the date of placing of LOI (Letter of Intent) by LIOC. And we accept that, failing above condition, our EMD will be forfeited by LIOC.

Date :
Place :

**Tenderer's signature
Seal**

N.B.

- A separate sheet may be attached, if the above is not sufficient.
- Strike out whichever is not applicable. If the tenderer employs any person subsequent to signing the above declaration and the employee/s so appointed happens to be the near relatives of the Officer/Director of LIOC, the tenderer should submit another declaration furnishing the name/s of such employee/s who is/are related to the officer/s of LIOC
- List of Directors of LIOC board is attached.

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LIST OF DIRECTORS OF LANKA IOC PLC

SN	NAME OF THE DIRECTORS & ADDRESS
01	Mr. Ranjan kumar Mohapatra , Chairman LIOC, Director (HR) Indian Oil Corporation Limited, Indian Oil Bhavan, G-9, Ali Yavar Jung Marg, Bandra (East), <u>Mumbai (India) - 400 051.</u>
02	Mr. N V N Ramsai , Director LIOC, ED (Finance), Indian Oil Corporation Limited, (Marketing Division), Indian Oil Bhavan, G-9, Ali Yavar Jung Marg, Bandra (East), <u>Mumbai (India) - 400 051.</u>
03	Mr. Sajeev K Jain , Director/ LIOC, ED (Retail Sales) Indian Oil Corporation Limited, (Marketing Division), Indian Oil Bhavan, G-9, Ali Yavar Jung Marg, Bandra (East), <u>Mumbai (India) - 400 051.</u>
04	Mr. Shyam Bohra , Managing Director, LIOC, 20 th Floor, West Tower, World Trade centre, Colombo - 01, Sri Lanka.
05	Prof. Lakshman R. Watawala , Director, Lanka IOC PLC, No: 102/ 5, Barnes Place, Colombo - 07, Sri Lanka.
06	Mr. Amitha Goonaratne , Director, Lanka IOC PLC, No 110, Noris Canal Road, Colombo - 10, Sri Lanka.

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ANNEXURE-IX

PROFORMA OF PERFORMANCE GUARANTEE (SECURITY DEPOSIT)

WHEREAS.....OF.....(hereinafter referred to as the Contractor has agreed to enter into a contract for the consideration of Rupees.....(Rs.....) with the (hereafter referred to as the OWNER) for the construction of Proposed.....

AND WHEREAS it is one of the conditions of the said Contract that the Contractor should furnish a Bank Guarantee in the sum of Rupees.....(Rs.) being percent (%) of the value of the Contract for the due and punctual performance and fulfillment of the Contract above referred to.

AND WHEREAS the Contractor has requested the.....to furnish the requisite Bank Guarantee and whereas the.....has agreed to do so.

KNOW THAT..... a Bank incorporated under (Cap) and having its registered office in in consideration of such agreement as aforesaid hereby guarantee undertake bind and oblige ourselves to the OWNER that if the CONTRACTOR shall fail in the and punctual performance and fulfillment of the Contract above referred to, then and in that case to make payment to the OWNER in a sum not exceeding Rupees (Rs.....) provided that the rights and remedies of the OWNER hereunder are to be cumulative and in addition to and not in substitution for its rights and remedies under the said contract and this Guarantee shall not be prejudiced avoided or affected by any indulgence or forbearance of the OWNER towards the Contractor in connection with the said Contract.

AND IT IS also hereby agreed that notwithstanding anything to the contrary herein contained this Guarantee shall be valid only up to and including the thirty first day of and shall not thereafter be of any force of avail in law except in respect of claims lodged by the OWNER with under these present on or before the thirty first day of on account of monies that may be and/or become due to the OWNER by the Contractor by reason of his failure to duly and punctually perform and fulfill the Contract above referred to : provided however, that in case shall have before the said thirty first day of, extended the period for validity of this Guarantee upto any date subsequent to the said thirty first day of then the preceding provisions of this Clause shall stand amended and read as if the date to which the Guarantee is so extended had been inserted at the time wherever in the proceeding provisions of the Clause the said date, thirty first day of, occurs and this Guarantee shall have force accordingly. Such period of validity may similarly be extended from time to time so as to keep the Guarantee in full force upto such extended date or dates.

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Date at this day of 20.....

FOR

Sgd.....

Sgd

(Accountant)

(Manager)

WITNESS

1..... 2.

DATE:.

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SEAL

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Annexure—X

PROFORMA LETTER FOR AUTHORITY FROM MANUFACTURER

To,
SVP (E)
Lanka IOC PLC
Level 20, West Tower,
World Trade Centre, Echelon Square
Colombo 01
Sri Lanka
Sir,

Sub: Tender No. _____

We _____ confirm that Mr. _____ (Name and address)
as authorised to represent us to Bid, negotiate and conclude the agreement on our behalf
with you against Bid Document No. _____ for hiring of services for

We confirm that we shall be bound by all and whatsoever our said representative shall
commit.

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Designation: _____

Authorized e-Mail id :

Authorized Fax No :

Seal of the Bidder:

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed
by a person competent and having the power of attorney (power of attorney shall be
annexed) to bind such Bidder. If signed by a consortium, it shall be signed by members of the
consortium.

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Annexure—XI

PROFORMA FOR DECLARATION OF GENUINENESS OF DOCUMENTS

To,
 SVP (E)
 Lanka IOC PLC
 Level 20, West Tower,
 World Trade Centre, Echelon Square
 Colombo 01
 Sri Lanka
 Sir,

Subject.: Declaration of genuineness of documents submitted for Tender No.

We, M/s....., the bidder against the subject tender, hereby declare that all documents, submitted with tender as per tender condition or to be submitted during execution of contract, are genuine and correct.

In case any document is found to be false / forged / incorrect at any point of time including execution of contract, we shall be liable for all consequences and responsible for making good any loss to the trustees. Moreover, in such case trustees reserve the right to take action against us as deemed proper.

Yours faithfully
 (NAME)
 for & on behalf of M/s.....
 (Name of Manufacturers)

Note: This letter of authority should be on the Letter-Head of the manufacturing concern and

SIGNATURE OF TENDERER
 SEAL



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Annexure—XII

**SITE ACCEPTANCE CHECK LIST FOR RETAIL OUTLET AUTOMATION
SYSYTEM**

**SIGNATURE OF TENDERER
SEAL**