

बिड दस्तावेज़ / Bid Document

बिड विवरण / Bid Details	
बिड बंद होने की तारीख/समय / Bid End Date/Time	22-09-2026 13:00:00
बिड खुलने की तारीख/समय / Bid Opening Date/Time	22-09-2026 13:30:00
बिड पेशकश वैधता (बंद होने की तारीख से) / Bid Offer Validity (From End Date)	180 (Days)
मंत्रालय/राज्य का नाम / Ministry/State Name	Ministry Of Ports, Shipping And Waterways
विभाग का नाम / Department Name	Na
संगठन का नाम / Organisation Name	Directorate General Of Lighthouses And Lightships
कार्यालय का नाम / Office Name	Gandhidham
शिकायत निवारण के संपर्क विवरण / Contact details of Grievance redressal	HOD Email id :dte-vts@nic.in Buyer Email id: ajeet-dgll@nic.in
कुल मात्रा / Total Quantity	2386
वस्तु श्रेणी / Item Category	1000V DCDB 2 In 2 Out , 30KW 3 Phase ACDB , 6 Sq.mm Solar DC Cable , 30KW Solar Grid Inverter , MC4 Solar Connector Set , 250W or Higher Solar PV Module , MC4 Solar Crimping Tool , AC DC Clamp Meter , Solar Generation IoT Monitoring Device , 63mm DWC HDPE Pipe , 63mm UPVC Pipe , Solar Cable Trench Excavation Work , Solar Powered Aviation Obstruction Light , Commercial High Pressure Washer , Silver Grey Exterior Metallic Paint , Painter for Solar Structure Painting , RCC Road Breaking and Reinstatement Work , Solar PV Panel and DC Cable Installation Work , DCDB ACDB Installation and Cable Work , RCC Cable Trench Marker , Aviation Obstruction Light Tower Installation Work
GeMARPTS में खोजी गई स्ट्रिंग्स / Searched Strings used in GeMARPTS	Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS station
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Category not available on GeM for the text string uploaded by the buyer
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	- On Grid Solar Inverter - Solar Power Plant (Roof Top) for ONGRID System, Three Phase (V2)
बीओक्यू शीर्षक / BOQ Title	Solar and Electrical work at Navinal VTS Station

बिड विवरण/Bid Details	
बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का) /Minimum Average Annual Turnover of the bidder (For 3 Years)	4 Lakh (s)
मूल उपकरण निर्माता का औसत टर्नओवर (गत 3 वर्षों का)/OEM Average Turnover (Last 3 Years)	25 Lakh (s)
उन्हीं/समान सेवा के लिए अपेक्षित विगत अनुभव के वर्ष/Years of Past Experience Required for same/similar service	3 Year (s)
टर्नओवर पात्रता मानदंड/Turnover eligibility criteria	GeM verified turnover
एमएसएमई के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है/MSE Relaxation for Years of Experience and Turnover	No
स्टार्टअप के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है /Startup Relaxation for Years of Experience and Turnover	No
विक्रेता से मांगे गए दस्तावेज़/Document required from seller	Experience Criteria,Past Performance,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover,Additional Doc 1 (Requested in ATC),Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेजों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेन् है/Do you want to show documents uploaded by bidders to all bidders participated in bid?	Yes (Documents submitted as part of a clarification or representation during the tender/bid process will also be displayed to other participated bidders after log in)
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	3
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	3
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	2
विगत प्रदर्शन /Past Performance	80 %
बिड से रिवर्स नीलामी सक्रिय किया/Bid to RA enabled	No
बिड का प्रकार/Type of Bid	Two Packet Bid
प्राथमिक उत्पाद श्रेणी/Primary product category	30KW Solar Grid Inverter

बिड विवरण/Bid Details	
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय /Time allowed for Technical Clarifications during technical evaluation	2 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
अनुमानित बिड मूल्य / Estimated Bid Value	1279550
मूल्यांकन पद्धति/Evaluation Method	Total value wise evaluation
मध्यस्थता खंड/Arbitration Clause	No
सुलह खंड/Mediation Clause	No

ईएमडी विवरण/EMD Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईएमडी राशि/EMD Amount	25600

ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईपीबीजी प्रतिशत (%) /ePBG Percentage(%)	5.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	63

(a). जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित कैटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने हैं। एमएसई कैटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।/EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b).ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

(c).ईएमडी और संपादन जमानत राशि लाभार्थी के पक्ष में होनी चाहिए। / Earnest Money Deposit (EMD) shall also be accepted by the buyer in the form of a surety bond.

लाभार्थी /Beneficiary :

Deputy Director General
Directorate of Lighthouses and Lightships VTS Gandhidham Plot 17 Sector 8 Deep Bhavan Gandhidham Kutch
Gujarat 370201
(Deputy Director General, Directorate Of Lighthouses And Lightships Gandhidham)

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य $L1+X\%$ तक की सीमा में है / Purchase Preference to MII sellers available upto price within $L1+X\%$	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50
सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)

एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं/सेवा प्रदाता को खरीद में प्राथमिकता, यदि उनका मूल्य $L1+X\%$ / Purchase Preference to MSE OEMs/ Service Provider available upto price within $L1+X\%$	15
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माता/सेवा प्रदाता को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Percentage of Bid quantity/amount for MSE OEMs/ Service Provider Purchase preference	25

1. The minimum average annual financial turnover of the bidder during the last three financial years, ending on 31st March of the previous financial year, should be as indicated in the bid document. The turnover of the bidder shall be validated by the system based on the financial data available on the GeM portal. The average turnover shall be calculated based on the last three financial years where data is available; in case data is available for only two of the last three financial years, the average shall be computed based on those two years. In case the date of constitution / incorporation of the bidder is less than three years old, the average turnover in respect of the completed financial years after the date of constitution / incorporation shall be taken into account for this criterion. No separate documentary evidence is required to be uploaded by the bidder for this criterion, as the system shall derive and validate the turnover figures from the data available on the GeM portal.
2. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
3. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid

document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

4. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 and its subsequent Orders/Notifications issued by concerned Ministry. Benefits of MSE will be allowed only if seller/service provider is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

5. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs having valid Udyam Certificate and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service, and Buyer will decide eligibility for purchase preference based on documentary evidence submitted in case of product bids, whereas in case of services the eligibility is automatically validated. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

6. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

7. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 80% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

Pre Bid Detail(s)

मूल्य भिन्नता खंड दस्तावेज/Pre-Bid Date and Time	प्री-बिड स्थान/Pre-Bid Venue
10-09-2026 16:00:00	Directorate of Lighthouses and Lighthships VTS Gandhidham, Plot 17 Sector 8 Deep Bhavan Gandhidham Kutch Gujarat 370201

1000V DCDB 2 In 2 Out

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

प्रेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.N o.	प्रेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	6	60

30KW 3 Phase ACDB

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	2	60

6 Sq.mm Solar DC Cable

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	2200	60

30KW Solar Grid Inverter

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.No.	परिषदी/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

MC4 Solar Connector Set

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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परिषदी/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परिषदी/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	8	60

250W Or Higher Solar PV Module

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	6	60

MC4 Solar Crimping Tool

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	2	60

AC DC Clamp Meter

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

Solar Generation IoT Monitoring Device

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

63mm DWC HDPE Pipe

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	115	60

63mm UPVC Pipe

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	20	60

Solar Cable Trench Excavation Work

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	11	60

Solar Powered Aviation Obstruction Light

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	4	60

Commercial High Pressure Washer

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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क्र.सं./S.N o.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	2	60

Silver Grey Exterior Metallic Paint

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

Painter For Solar Structure Painting

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

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क्र.सं./S.N o.	परिषी/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

RCC Road Breaking And Reinstatement Work

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications**Specification Document**[View File](#)**BOQ Detail Document**[View File](#)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

Solar PV Panel And DC Cable Installation Work

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

DCDB ACDB Installation And Cable Work

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

RCC Cable Trench Marker

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

Aviation Obstruction Light Tower Installation Work

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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1	Ninama Sanjaykumar Somabhai	370421,Navinal VTS and Lighthouse Station, Near Adani House, Mundra Port	1	60

क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/Buyer Added Bid Specific Terms and Conditions

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$, subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

2. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file.](#)

अस्वीकरण/Disclaimer

The Additional Terms and Conditions (ATC) have been incorporated by the Buyer after approval of their Competent Authority. The Buyer is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any restriction arising in the bidding process due to these ATCs and including the modification of technical specifications and / or terms and conditions governing the bid. All representations / grievances pertaining to the ATC clauses shall be raised with the buyer organization directly and not with GeM. If any of the clause(s) is/are incorporated by the Buyer regarding the following, the bid & resultant contract shall be treated as null & void. Further, GeM reserves the right, at its sole discretion, to cancel the bid forthwith, without issuance of any prior notice or intimation :-

1. Publishing Custom / BOQ bids for items for which regular GeM categories are available (unless such Custom / BOQ item is bunched with the major regular product Category Item).
2. Mandating procurement of / from specific Brand / Make / Model / Manufacturer / Dealer except in case of Single Bid / Proprietary Article Certificate (PAC) Buying.
3. Inclusion of disqualification criteria related to suspension of seller / service provider, where such suspension period has already expired.
4. Mandating submission of documents (other than EMD and signed Integrity Pact - which can be submitted within 5 days of bid opening) in physical form as a pre-requisite to qualify bidders.
5. Publishing bids on GeM for procurement of works.
6. Procurement of Goods by creating a Service bid on GeM & vice-versa.
7. Seeking sample with bid or approval of samples during bid evaluation process. However, trial / sample, as the case may be, shall be permitted in cases where trial / sample are allowed as per approved and published procurement policy of the Buyers' controlling Ministry / Department / State / Public Sector Enterprises Headquarters. If there is any violation of trial / sample clause with regard to approved policy of the Buyers' Ministry / Department / State / Public Sector Enterprises Headquarters, then this is to be determined and redressed by the concerned Buyer Organisation only.
8. Seeking experience from specific organization / department / institute only or from foreign / export experience.
9. Creating bid for items from incorrect categories.
10. Reference of conditions published on any external site or reference to external documents/clauses.
11. Asking for any Tender fee / Bid Participation fee, as the case may be.
12. Buyer added ATC Clauses which are in contravention of clauses defined in bid detail section, including specifications, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by the applicable GeM GTC.
13. Any ATC clause in contravention with GeM GTC Clause 4 (xiii) (h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.
14. In a category based bid, adding additional items, through buyer added, additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogues

or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

This Bid is governed by the General Terms and Conditions, conditions stipulated in Bid and Service Level Agreement specific to the Service, as the case may be, as provided in the Marketplace.

However, in case of Service, if any condition specified in General Terms and Conditions is contradicted by the conditions stipulated in Service Level Agreement specific to said Service, then it will over-ride the conditions in the General Terms and Conditions.

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---धन्यवाद/Thank You---

भारत सरकार पत्तन,पोत परिवहन और जलमार्ग मंत्रालय दीपस्तंभ और दीपपोत निदेशालय "दीपभवन" प्लॉट नो 17 -, सेक्टर" 8 - वी .टी .एस .निदेशालय ,गांधीधाम, (गुजरात)-370201		Govt. of India Ministry of Ports, Shipping and Waterways Directorate of Lighthouses & Lightships Deep Bhavan" Plot No. 17 Sectors - 8 V.T.S. Directorate, Gandhidham, (Gujarat)-370201
Email-dydgvt@gmail.com/ dte-vts@nic.in		Tele: 02836-299104/004/001

संचिका : EMDVTS-08014/1/2020-Maintenance

अतिरिक्त नियम एवं शर्तें **Additional Terms and Conditions**

S.No.	Subject	Description
1	कार्य का नाम Name of work	Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS station
2	कार्य स्थल Location	Navinal VTS & Lighthouse Station, Adani Port Mundra, Dist. – Kutch, Gujrat-370421 (Station in-charge/ staff contact no. 7405033062/8511281947/9909812560)
3	अनुमानित राशि Estimated cost	₹ 12,79,550/- (Including GST and all taxes)
4	EMD	₹ 25,600/- Original EMD is required to be submitted Deep Bhavan" Plot No. 17 Sectors – 8 V.T.S. Directorate, Gandhidham, (Gujarat)– 370201, on or before the bid submission date and time
5	Time of completion	60 days from Contract generation

1. Eligibility Criteria:

1.1 Experience of having successfully completed similar works during last 07 years ending last day of month previous to the one in which bid is invited should be either of the following:

- Three similar completed works each costing not less than the amount equal to 40% of the estimated cost.
- Two similar completed works each costing not less than the amount equal to 50% of the estimated cost.
- One similar completed works costing not less than the amount equal to 80% of the estimated cost.

Similar works means, "Supply/installation/commissioning/maintenance of solar PV systems/ solar inverter/ solar DC cabling/ solar associated electrical works" in Central Govt. / State Govt. / P.S.U. For proof of similar work, the agencies have to submit work completion certificate / GeM CRAC issued by Central Govt. / State Govt. / P.S.U.

1.2 Earnest money Deposit (EMD) in the form DD/FDR as per GeM. The EMD

exemption, is only for bidders who are OEM for items offered in the bid. There is no exemption for bidder who are participating as reseller/ distributor/ Traders etc. Original EMD is required to be submitted Deep Bhavan" Plot No. 17 Sectors – 8 V.T.S. Directorate, Gandhidham, (Gujarat)–370201, on or before the bid submission date and time failing which the bid will be not be considered and shall be rejected outrightly and NO further correspondence shall be entertained.

1.3 The bidder should not be blacklisted. Accordingly, an undertaking on letterhead that the bidder is not blacklisted in the format as per **Annexure -III.**

1.4 The bidder has to submit technical compliance sheet and declaration as per **Annexure -I.**

1.5 The bidder has to submit detailed technical brochure therein clearly defined Make and Model of the Items to be supplied with detailed specifications.

1.6 The bidder must have GST registration for which copy shall be submitted.

1.7 The bidder should have local office in Kutch region or maximum within 320 Kms radius of Gandhidham to attend defects immediately. GST Certificate/ Shop and Establishment Registration issued by Gujarat Govt./ Uddyam Registration certificate shall be accepted as proof of address of office

1.8 The bidder must submit Tender Acceptance Letter as per format given in **Annexure-II.**

1.9 The bidder must submit undertaking as per format given in **Annexure-IV.**

The bid shall be technically disqualified if any of the above-mentioned documents are not submitted.

2. The Deputy Director General-VTS will determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the tender document. For the purposes of determination, a substantially responsive bid is one that conforms to all the terms, conditions & specifications of the tender document without any deviations, objections, conditionality or reservation. Financial bid shall be opened only of those bidders who are found eligible as per eligibility criteria mentioned in Clause 1.

3. **Prebid Meeting**

The prospective bidders are advised to go through the GEM bid and respective Additional Terms and conditions very carefully before quoting. They should satisfy themselves about the scope of work to be carried out. In case of any queries same is to be submitted on or before pre-bid meeting date as mentioned in GeM portal. Under no circumstances issues raised by the bidder will be entertained once bids are opened.

4. **Award of Contract on GeM :**

The employer shall award the Contract on GeM to the bidder whose bid has been determined to be responsive to the bid document and who has offered the lowest bid price (L1) after issuance of LOI and receipt of Performance warranty cum security deposit.

5 **Scope of the work:**

Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS Station as per specifications and BoQ. Schedule of work as per BoQ is mentioned below:

- - **BoQ1:** SITC of 2 in 2 out, 1000V DCDB with 32A DC Fuse, 1000V SPD and 30A DC MCB in the 2 x string having 20 Nos. panels in each string, IP67 or better. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ2:** SITC of 30KW 3PH ACDB with inbuilt AC MCB 63A, AC SPD 320V and phase indicators (R,Y,B), IP65 or better, suitable for the solar power system. Total 2 Nos. including 1 spare. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ3:** SITC of Solar DC cables, IS 17293:2020 standard, XLPO, TUV protected, 6 sq.mm, red and black, tin-plated conductor, double layered XLPE/PVC, voltage rating 1.5(1.8) kV DC; total approximately 2200 metres including interconnection and spare. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ4:** SITC of 30 KW on-grid solar inverter, Delta make, model, M30A_230 to replace existing 30KW Delta make, model RPI M30A_121. It should be compatible with existing solar structure and strings.
 - **BoQ5:** Supply of MC4 male/female solar connectors suitable for 6 sq.mm cables, UV resistant, waterproof and anti-flame; total 400 connectors. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ6:** SITC of Solar PV Modules/Panels, 250W or more, Class-A, polycrystalline silicon terrestrial; 06 Nos. including replacement and spare. The defective panels (minimum 04 nos. maximum 06 nos.) shall be removed and new panels shall be installed in the same place. All the additional accessories viz. SS nut bolts, frame extension and all related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
- **BoQ7:** Supply of professional Solar MC4 crimping tools with MC4 wrench spanner; 02 Nos.
- **BoQ8:** Supply of AC/DC Clamp Meter with AC voltage range 600V or better, DC voltage range 1000V or better, AC current range 1000A or better and DC current range 1000A or better.
- - **BoQ9:** SITC of IoT (Internet of Things) device for monitoring solar generation, compatible with supplied solar inverter as well as existing Delta Inverter M30A, supporting RS-485, GSM and Wi-Fi connectivity, including SIM and recharge for 03 years. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ10:** Supply and laying of 63mm DWC HDPE pipe, ISI marked, conforming to IS 14930 Part-II, complete with sockets, bends, couplers, cutting and jointing in existing trench. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
- **BoQ11:** Supply of 63mm UPVC pipe with necessary bends for routing cables from HDPE pipe to inverter and interconnecting strings.
- **BoQ12:** Excavation of cable trenches in soft soil approximately 120m x 0.3m x 0.3m, including getting out excavated soil and refilling after laying cable/pipe.

- - **BoQ13:** SITC of Solar-powered aviation obstruction light, having 360° horizontal illumination by high-intensity Red LEDs, steady-burning/fixed type, with minimum luminous intensity as per the applicable aviation obstruction-light category, 12 V DC solar panel input, automatic dusk-to-dawn operation through built-in photocell, rechargeable maintenance-free battery providing minimum 2 nights autonomy, IP66 or better protection, fully sealed and waterproof construction, housing/casing made of SS-304 or better with UV-resistant coating/paint suitable for outdoor and coastal/marine atmospheric conditions, UV-stabilized lens, LED life of minimum 50,000 hours, suitable protection against overcharging, deep discharge and reverse polarity, complete with solar panel, battery, mounting arrangement, cables, accessories and all necessary hardware for installation, testing and commissioning. Fixing of aviation obstruction light is covered under BoQ 21. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
- - **BoQ14:** SITC of commercial high-pressure washer, 2200W, 200–300 bar or better, minimum capacity 16L or better, trolley included; 02 Nos. All related works for installation testing and commissioning are in the scope of work and no extra payment shall be made.
 - **BoQ15:** Supply of silver grey exterior metallic paint including required quantity turpentine/ thinner for painting all frames of solar structure. Complete solar structure of 30KW solar system and any associated solar system structure has to be painted, 02 coats. After completion of painting, additional 02 litres paint and 01 litre turpentine/ thinner shall be provided as spare for future use.
 - **BoQ16:** Hiring of painter for complete painting of 30KW solar structure and associated structure, if any. Comprehensive surface preparation (wire brushing, scaling off rust flakes) and application of protective primer followed by a double coat of exterior metallic paint on the existing solar mounting structure frames. Protective primer is included in the scope of this BoQ and no extra payment will be made.
 - **BoQ17:** Breaking of RCC road crossing (approx. 3m) for laying HDPE pipe (approximately 6-8 inch depth) and subsequent reinstatement including material, labour, breaker/operator and mason/labour and curing charges. Road should be brought back to original state.
 - **BoQ18:** Connecting existing solar panels serially into 6 strings (Total 120 panels, 250W each); removal of defective panels (Presently 03 nos., may be upto 06 nos. after proper testing by the contractor during work of installation) and installation of replacement panels as required; mounting on the existing frame with SS Z-clamp and SS nut bolts. Connecting solar DC cables through DCDB to on-grid solar inverter. All DC cables to pass through HDPE pipe underground with proper workmanship. Fixing of cable tray on wall inside the power house for proper routing with appropriate lugs and fittings. All old and defective solar cables shall be removed, properly rolled and handed over to Navinal Lighthouse station in-charge/staff.
 - **BoQ19: (a)** Fixing of 04 nos. of 2 In 2 Out DCDBs at solar panel strings with proper SS nut bolts, copper clamps, appropriate lugs and fittings.
 - b. Fixing and mounting of ACDB and connection with the on-grid solar inverter with proper mounting accessories and cabling.
 - c. Tagging the strings and junction boxes/ ACDB/ DCDBs by labelling properly with long lasting stickers/ PV labels.

- d. Sealing the opening of HDPE and UPVC pipe opening with proper sealants (silicon sealant or better).
- e) 2inch Painting Brush-2Nos for painting work (to be handed over to Navinal Lighthouse station in-charge/ staff after completion of work in proper cleaned condition for future use).
- f) Any other work required for complete execution and satisfactory completion of the work in all respects, including all incidental, ancillary and associated works, whether specifically mentioned in the BoQ or not, but necessary for proper completion, installation, testing and commissioning of the work, shall be deemed to be included in the quoted rates. The bidder shall inspect and assess the site conditions, site requirements and scope of work before quoting and shall accordingly include all necessary provisions in the quoted rates. No additional payment shall be admissible for such incidental or ancillary works required for completion of the work in all respects.

- **BoQ 20:** Supply and installation of precast RCC cable route/trench markers, minimum 300 mm above ground level or higher, of suitable cross-section and adequately reinforced for outdoor use, painted in appropriate Yellow/Red colour with two coats of weather-resistant exterior paint, clearly marked with suitable "ELECTRICAL CABLE" / "CAUTION" identification in durable black lettering on both sides. The markers shall be properly fixed/embedded in concrete or compacted soil along the cable trench route at a maximum spacing of 2 metres, from the solar PV strings up to the Power House and at all bends, crossings and junctions, as required. The work shall include supply, transportation, excavation, fixing/installation, painting, lettering and all necessary materials, labour and incidental works for complete installation. Minimum quantity: 50 Nos., more as per requirement of site to complete marking.
- **BoQ 21:** Fixing of 03 Nos. aviation obstruction light with solar module on the top of the 60mtr tower including SS fixing accessories, complete work. All the old/ defective accessories associated with this work wherein they are replaced with new accessories/ devices shall be properly removed and handed over to Navinal Lighthouse Station in-charge/ staff. The scope shall include supply and installation of all required SS fixing brackets, stainless-steel clamps, bolts, nuts, washers, supports, mounting hardware, cables, cable ties/clamps and other accessories required for secure fixing of the lights and solar modules on the tower. The solar module and associated equipment shall be securely mounted and oriented suitably for optimum solar charging. All electrical connections shall be properly protected against weather, moisture and corrosion. The work shall include safe access, lifting/handling, installation at approximately 60m height, testing, commissioning and demonstration of satisfactory operation, including all labour, tools, tackles, safety equipment, transportation and incidental works required to complete the job. All such works are within the scope and no extra payment shall be made.

6. Special Terms and Conditions:

6.1 The price quoted by the bidder should include all expenses incurred in supply, transportation, installation, testing, commissioning and all accessories/consumables/other items required to complete the work. Bidders are advised to visit the site before quoting. Any necessary extra work including

material/labour required for completing the work shall be carried out by the bidder. No extra payment shall be made.

6.2 All supplied and installed items should be new, unused, of good quality and conform to the specifications given in the tender/BOQ. It is advisable that bidders should visit the site before quoting.

6.3 If the present performance of the bidder in a current contract for any major work is unsatisfactory as certified by the relevant authority, the offer of the bidder may be summarily rejected.

6.4 The rate quoted shall be for destination. No other expenses shall be borne by the Buyer other than what is quoted in Bid Document.

6.5 The rates shall be quoted in Indian Currency only and if quoted in other currency, the offer will be rejected.

6.6 The Deputy Director General-VTS does not bind himself to accept the lowest or any bid. He is free to reject any or all bids received without assigning any reason. He also reserves the right to accept the whole or any part of the bid and bidder shall be bound to perform the same at the rate quoted. All bids in which prescribed conditions are not fulfilled or are incomplete are liable to be rejected. Canvassing in any form is strictly prohibited.

6.7 Any effort by a bidder to influence the Deputy Director General-VTS in the process of examination, clarification, evaluation and decisions concerning award of contract may result in rejection of the bid.

6.8 The Contractor shall be solely responsible for the safety, security, health and welfare of all personnel deployed by him for execution of the work. The Contractor shall provide all necessary personal protective equipment (PPE), safety equipment and precautions and shall comply with all applicable safety rules, regulations and statutory requirements during execution of the work.

6.9 The Contractor shall take all necessary precautions to protect departmental property, buildings, structures, equipment, cables, installations and other assets during execution of the work. Any damage caused to departmental property due to the acts, omissions or negligence of the Contractor or his personnel shall be made good/repaired or replaced by the Contractor at his own cost, to the satisfaction of the Department, without any additional financial liability to the Department.

6.10 Payment Terms

Payment to the Contractor shall be made as per details given below: -

- i. **1st stage payment: 40% payment will be made on successful completion of Supply of all the items as per BoQ.**
- ii. **Final stage payment: 60% payment will be made after 15 days of will be made after successful completion of installation, testing and commissioning and acceptance by the Department.**
- iii. **Invoice along with relevant documentary evidences shall be raised in GeM.**
 - I. All product documents as supplied by OEM.
 - II. Warranty Card/ warranty certificate.

Final stage payment shall be released only after ascertaining the complete specifications, warranty certificates and completion of all the works mentioned in the tender.

6.11 Penalty clause:

6.11.1 Throughout the stipulated period of contract, the work shall be carried out with due diligence and time is the essence of contract. The contractor shall pay a sum equal to 0.5% of the cost of the work for each day the work remains incomplete beyond the stated period, provided that the entire penalty shall not exceed 5% of the contract value. In case delay is more than 15 days, the contract may be cancelled and PBG forfeited, and the work may be completed through another agency at the cost of the bidder.

6.11.2 All the case of delay shall be decided by the Deputy Director General of Lighthouses and Lightships, Gandhidham or his authorized representative.

6.11.3 **Defect rectification during warranty period of 05 years:** During the warranty period of five (05) years, in the event of any defect/failure being reported by this office/Navinal Lighthouse, the Contractor shall attend the reported fault within twenty-four (24) hours and take necessary action for rectification. In case the defect cannot be rectified immediately due to non-availability/requirement of spare parts, the Contractor shall provide an alternative arrangement and restore the operation of the system within seventy-two (72) hours. For the purpose of this clause, "alternative arrangement" shall mean restoration of operation of the system by bypassing the defective component(s) until the required spare part(s) are received and installed. Such bypassing/alternative arrangement shall not be permitted for a period exceeding fifteen (15) days from the date of reporting of the defect, and a penalty of ₹500/- (Rupees Five Hundred only) per day shall be imposed from the 16th day onwards until complete rectification of the defect. If the cumulative penalty imposed under this clause exceeds ₹10,000/- (Rupees Ten Thousand only), the Performance Guarantee (PG) shall be liable to forfeiture, and the Department shall have the right to get the defect rectified at the risk and cost of the Contractor. Further, in such an event, the Contractor shall be liable for blacklisting/debarment from participation in tenders of the Department for a period of three (03) years, subject to applicable Government rules and due process.

6.12 **Warranty:** The warranty for all supplied items as per BoQ and complete 30KW on-grid solar system (Solar inverter, DC cables, ACDB, DCDB, Solar panels etc.) including earlier installed solar panels shall be 05 years.

6.13 **Performance Guarantee cum security deposit:** The work order on GeM shall be issued to L1 bidder. Within 10 days of receipt of LOI/work order/ GeM contract order, the successful bidder will furnish the contract Performance Guarantee cum security deposit in favour of Deputy Director General, Directorate of Lighthouses and Lightships, Gandhidham @ 5% of the value of the contract, valid for a period of 63 months from the date of installation & commissioning of the work in the form of FDR from any scheduled commercial bank. The original documents shall be the same which is uploaded on GeM portal otherwise the Bid shall be rejected and action shall be taken as per prevailing Govt. norms and the tender terms and conditions

6.14 Other General Conditions such as, Force majeure, termination, cancellation etc. shall be as per latest Gem GTC.

7. Brief Technical Specifications

7.1 The work of Replacement of defective DC solar cables, ACDB, supply of

DCDB and other Electrical items for Navinal Lighthouse and VTS station shall have the following minimum specifications :

क्रमांक	Description of Items	Specifications
1.	SITC of 2 in 2 out 1000V DCDB, 32A DC Fuse, 1000V SPD and 30A DC MCB in the 2X string having 20 Nos. of panels in each string, IP67 or better standard (Qty 4Nos + 2 Nos. spare = 6Nos.)	Supply, Installation, Testing, and Commissioning (SITC) of a 2-Input 2-Output Direct Current Distribution Board (DCDB) rated for 1000V DC. Equipped with 32A DC Fuses for string protection, 1000V Type-II Surge Protection Device (SPD), and a 30A DC Miniature Circuit Breaker (MCB). Enclosure must be UV-stabilized polycarbonate or CRCA powder-coated metal with an IP67 or better ingress protection rating, specifically engineered to withstand harsh coastal and dusty environment, suitable for 2 independent strings having up to 20 panels each. Preferred brands: Kenbrook solar/Kampsol Industries/Accu-Panels Energy/Hensel India/Rittal India
2.	SITC of 30KW 3PH ACDB with Inbuilt AC MCB 63A, AC SPD 320V & phase Indicator (R, Y, B), IP65 or better, dustproof and anti-corrosion heat resistant solar combiner wall mount box. (Qty 1Nos + 1 Nos. spare = 2Nos.)	SITC of a 30 kW, 3-Phase Alternating Current Distribution Board (ACDB). Features an integrated 63A AC MCB/MCCB, 320V AC Surge Protection Device (SPD), R-Y-B phase indication lights, and a digital multi-function meter (MFM) for parameter tracking. Built inside an enclosure with IP65 or better protection, featuring dustproof, anti-corrosion, heat-resistant properties, and wall-mounting configuration. Preferred brands: Kenbrook solar/Schneider Electric/L&T Electrical & Automation/ABB India/Siemens India
3.	SITC of Solar DC cables IS17293:2020 std, XLPO (Cross-Linked Polyolefin) TUV Protected 6Sq.mm Cables (Red and Black), low conductor resistance, TIN plated conductor, double layered XPPE/ PVC, anti-corrosive, Voltage Rating: 1.5(1.8) KV DC 300meter (150mPositive + 150mNegative =300meter) x 6string = 1800 meter + 200meter interconnection wiring = 2000meter + 200meter Spare = 2200meters.	6 sq. mm single-core flexible solar DC cable: Features a high-purity, annealed, tin-plated copper conductor with Low Smoke Zero Halogen (LSZH) XLPO/XLPE insulation. UV-resistant, TUV-certified (EN 50618), rated for 1.5 kV DC (1.8 kV max), conforming to IS 17293:2020 standards. Preferred brands: Polycab India/KEI Industries/Finolex/RR Kabel
4.	SITC of 30KW Solar Grid Inverter, Maximum DC Input Power / Overload Capacity 32 KW, Rated Voltage DC 1050 Volt, Maximum DC Voltage 1100V, 2 Nos. of MPPT, Ingress protection IP 65 or better, LCD Display, Monitoring and configuration facility, forced air cooling, salient features like Over temperature, Power switch DC side, Overvoltage AC, Over voltage DC, Communication Port.	30 KW on-grid solar inverter, Delta make, model, M30A_230 to replace existing 30KW Delta make, model RPI M30A_121. It should be compatible with existing solar structure and strings.
5.	Supply of MC4 (male and female) Solar Connector for DC connection suitable for	Male and female MC4 photovoltaic connector pair suitable for 6 sq. mm solar cables. Manufactured from high-quality PPO (Polyphenylene Oxide) + PA material, offering high temperature,

	6Sq.mm cables, high quality PPO+PA material, UV resistance, waterproof and anti-flame. for 8 Set of 50 pairs (total 400 Nos.)	UV resistance, waterproof sealing (IP67), and anti-flame characteristics with low contact resistance. Preferred make: Stäubli (Original MC4)/ Amphenol Industrial/ Kenbrook/ Weidmüller/ Solocell /Multi-Contact/WAGO India/Daystar solution
6.	SITC of Solar PV Module/ Panel, 250W or more, Class-A, polycrystalline Silicon Terrestrial (03 Nos. for replacement and 03 Nos. spare = Total 06Nos.	250W or more; Class-A; polycrystalline silicon terrestrial; compatible with existing system: 250W or higher capacity terrestrial photovoltaic module: Class-A quality. Polycrystalline silicon construction with high light transmission tempered glass, resistant to PID, salt-mist corrosion, and sandstorms, Mechanically engineered to match and integrate smoothly with the existing system architecture. Preferred make Adani Solar/Waaree Energies/Vikram Solar/Tata Power Solar
7.	Supply of Solar MC4 professional crimping tool with MC4 wrench spanner.	Professional solar MC4 crimping tool with MC4 wrench/spanner: Professional-grade ratchet-action solar MC4 crimping tool kit. Comes complete with precisely milled dies for 2.5/4.0/6.0 sq. mm solar pins, ergonomic non-slip handle grips, and includes specialized MC4 assembly/disassembly wrenches (spanners). Preferred make: Dowell's/Stanley Tools/Taparia Tools/Proskit
8.	Supply of AC/DC Clamp Meter, AC Voltage Range 600V or better, DC Voltage Range 1000V or better, AC Current range 1000A or better, DC Current range 1000A or better.	AC voltage 600V or better; DC voltage 1000V or better: AC current 1000A or better; DC current 1000A or better: True-RMS professional digital AC/DC clamp meter. Measurement specifications: AC Voltage up to 600V+, DC Voltage up to 1000V+, AC Current up to 1000A+, and DC Current up to 1000A+ via jaw/flexible probe. CAT IV 600V / CAT III 1000V safety rating with a backlit digital display. Preferred make: Fluke India/Kyoritsu/Hioki India
9.	IoT (Internet of Things) Device for monitoring Solar Generation, compatible with Delta Inverter M30A, supporting RS-485 communication, GSM and WIFI connectivity including purchasing of SIM (01 No.) with recharge for 03 years (Device rate+03 years recharge)	Smart remote data logger and IoT monitoring gateway fully compatible with Delta Inverter (M30A model). Equipped with RS-485 serial interface, integrated GSM (4G/LTE or higher) and Wi-Fi connectivity options, inclusive of an active industrial SIM card and data recharge package for a period of 03 years for cloud portal synchronization. Preferred Brands: Delta Electronics/Solarman/Arrayistics
10.	Supply and laying of following size DWC HDPE (Double Wall Corrugated High Density Polyethylene pipe) ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.in the existing trench, complete as required 63mm dia (OD-63 mm & ID-51 mm nominal)	63mm nominal diameter Double Wall Corrugated High-Density Polyethylene (DWC HDPE) pipe. ISI marked, conforming strictly to IS 14930 Part-II standards. High ring stiffness, impact-resistant, supplied complete with necessary jointing accessories, couplers, and end caps for underground cable safety. Preferred Brands: Supreme Industries/Finolex Pipes/Ori-Plast/Apollo Pipes
11.	Supply of 63mm UPVC Pipe with necessary bends	63mm diameter Unplasticized Polyvinyl Chloride (uPVC) rigid pipes engineered for above-ground and outdoor electrical cable

	for routing cables from HDPE pipe to inverter and interconnecting strings	routing. UV-stabilized, high impact strength, complete with matching socketed bends, tees, solvent cement, and saddle clamps. Preferred Brands: Ashirvad Pipes/Supreme Industries/Astral Pipes/Prince Pipes
12.	Excavation of the cable trenches in soft soil 120L x 0.3W x 0.3H, including getting out the excavated soil, refilling with excavated soil after laying of cable/pipe as directed. Total excavation work area: Solar Panel Strings to power house = 120m Work to be executed: 120L x 0.3W x 0.3H = 10.8cum Say 11cum	Excavation of cable trench measuring approximately 120m lengthx0.3m widthx0.3m depth in soft soil matrix. Includes systematic earth excavation, dressing of sides, bottom compaction, laying of warning tape, sand cushioning, and safe refilling with ramming/compaction of backfill earth to original ground level.
13.	SITC of Solar powered Aviation obstruction Light with 360 Illumination by high intensity Red LEDs, Input Voltage: Solar Panel 12VDC, rating of IP 66 or better, sealed waterproof, Casing made of S.S painted with UV paint for atmospheric protection (03 Nos. for installation at the tower and 01 No. for spare)	Solar-powered aviation obstruction light, having 360° horizontal illumination by high-intensity Red LEDs, steady-burning/fixed type, with minimum luminous intensity as per the applicable aviation obstruction-light category, 12 V DC solar panel input, automatic dusk-to-dawn operation through built-in photocell, rechargeable maintenance-free battery providing minimum 2 nights autonomy, IP66 or better protection, fully sealed and waterproof construction, housing/casing made of SS-304 or better with UV-resistant coating/paint suitable for outdoor and coastal/marine atmospheric conditions, UV-stabilized lens, LED life of minimum 50,000 hours, suitable protection against overcharging, deep discharge and reverse polarity, complete with solar panel, battery, mounting arrangement, cables, accessories and all necessary hardware for installation, testing and commissioning. Preferred Brands: Geltronix / Instapower / Smart Tech Instruments & Controls / Bons Light
14.	SITC of Commercial High-Pressure Washer with 2200W, 200-300 Bar, minimum capacity of 16L or better, trolley included.	Heavy-duty commercial/industrial high-pressure washer suitable for cleaning high structures, VTS towers, platforms, buildings, equipment and outdoor installations, having electric motor of minimum 2200 W, operating pressure 200–300 Bar or better, water flow rate of minimum 16 L/min or better, suitable for continuous/extended-duty operation, with heavy-duty pump, automatic total-stop system, thermal/overload protection, suitable high-pressure hose of minimum 10 m length, spray gun/lance with adjustable nozzle, detergent/chemical application facility, inlet water filter, and heavy-duty trolley with wheels and handle for easy transportation. The equipment shall be suitable for outdoor use and supplied complete with all necessary accessories, fittings, hoses, nozzles, electrical cable and connections required for operation. Preferred Makes: Karcher / Bosch Professional / Nilfisk / Comet/ Bosch Power Tools/ ResQtech/Black & Decker
15.	Supply of Silver Grey exterior metallic paint for painting the frames of solar Structure	Premium quality exterior-grade anti-corrosive silver-grey metallic paint suitable for solar structure. Formulated with high-durability synthetic or polyurethane base resins designed to offer robust protection against severe atmospheric corrosion, high ambient temperature shifts, and saline sea winds

		standard. Preferred Brands: Asian Paints (Apcolite/Apex)/Berger Paints (WeatherCoat)/Dulux (AkzoNobel)/Nerolac Paints
16.	Painter hire for painting the frames of the solar structure at Navinal VTS station	Comprehensive surface preparation (wire brushing, scaling off rust flakes) and application of protective primer followed by a double coat of exterior metallic paint on the existing solar mounting structure frames.
17.	Breaking of RCC road (approx. 3mtrs) crossing for laying 60mm HDPE pipe and its refilling charges of channel including material cement, sand, water for mixing of concrete and curing, labour charges etc. (Including breaker, operator & mason/ labour charges)	Controlled Road cutting and crossing execution of approximately 3 meters span across existing Reinforced Cement Concrete (RCC) pathways. Scope covers precision concrete breaking, trenching, insertion of heavy-duty protective sleeve pipes, backfilling, material handling, labor deployment, and high-strength concrete restoration/reinstatement to match existing grade.
18.	a) Connecting 120 Nos. of existing solar panels serially in to 6 Nos. of strings with Solar DC Cables and removing 03 nos or more (as per requirement, max upto 06 nos.) defective solar panels and installing 3 Nos. or more Solar Panels (as per requirement, max upto 06 nos.), mounting on the existing frame properly with SS fittings only, appropriate lugs and fittings. b) Connecting the solar DC cables to existing On-grid Solar Inverter, fixing of cable tray on wall for proper routing with appropriate lugs and fittings.	Technical restructuring, electrical integration, and wiring connection of existing solar panels into 6 balanced strings. Includes troubleshooting, removal, and safe replacement of defective panels as identified during testing; proper mechanical torquing on mounting structures, neat cable routing with UV ties, and reliable termination into the inverter system.
19.	a) Fixing of 4 Nos. of 2 in 2 out DCDB at the solar panel strings with proper SS nut bolts, copper clamps, appropriate lugs and fittings. b) Fixing and mounting of ACDB and connecting with the existing inverter with proper mounting accessories and cabling. c) Tagging the strings and boxes by labelling properly long-lasting stickers/PV labels. d) Sealing the opening of HDPE and UPVC pipe opening with proper sealants e) 2inch Painting Brush- 2Nos for painting work,	Mechanical fixing, wall/structure mounting, and electrical connection of the DCDB and ACDB units. Includes precise glanding, proper crimping of tinned copper lugs, ferrule tagging of all power and control cores, internal wire management, and continuity testing prior to grid synchronization.

	f) any other work required to complete the work in all respect.	
20.	Supply and laying of (Yellow/ Red painted) RCC marker of 0.3 mtrs height or better for cable trench marking, laying 2 meters gaps from Strings to Power house. (min qty 50 Nos.)	Supply and installation of precast RCC cable route/trench markers, minimum 300 mm above ground level or higher, of suitable cross-section and adequately reinforced for outdoor use, painted in appropriate Yellow/Red colour with two coats of weather-resistant exterior paint, clearly marked with suitable "ELECTRICAL CABLE" / "CAUTION" identification in durable black lettering on both sides. The markers shall be properly fixed/embedded in concrete or compacted soil along the cable trench route at a maximum spacing of 2 metres, from the solar PV strings up to the Power House and at all bends, crossings and junctions, as required. The work shall include supply, transportation, excavation, fixing/installation, painting, lettering and all necessary materials, labour and incidental works for complete installation. Minimum quantity: 50 Nos.
21.	Fixing of 03 Nos. aviation obstruction light with solar module on the top of the 60mtr tower including SS fixing accessories, complete work	SITC of 03 Nos. solar-powered aviation obstruction warning lights on the top of the existing 60-meter-high tower, complete in all respects. The system shall be designed for automatic dusk-to-dawn operation, with suitable light-sensing/automatic ON-OFF arrangement. The LED obstruction light shall be weatherproof and suitable for continuous outdoor operation under the prevailing site conditions. The scope shall include supply and installation of all required SS fixing brackets, stainless-steel clamps, bolts, nuts, washers, supports, mounting hardware, cables, cable ties/clamps and other accessories required for secure fixing of the lights and solar modules on the tower. The solar module and associated equipment shall be securely mounted and oriented suitably for optimum solar charging. All electrical connections shall be properly protected against weather, moisture and corrosion. The work shall include safe access, lifting/handling, installation at approximately 60m height, testing, commissioning and demonstration of satisfactory operation, including all labour, tools, tackles, safety equipment, transportation and incidental works required to complete the job.

Bill of Quantity (BoQ)
(Schedule of work)

Name of work: Replacement of defective DC solar cables, ACDB, procurement of DCDB and other electrical items for Navinal Lighthouse and VTS station-reg.

क्रमांक	विवरण	मात्रा	दर (Including GST)	इकाई	रकम (Including GST)
1.	SITC of 2 in 2 out 1000V DCDB, 32A DC Fuse, 1000V SPD and 30A DC MCB in the 2X string having 20 Nos. of panels in each string, IP67 or better standard (Qty 4Nos + 2 Nos. spare = 6Nos.)	6		Nos.	
2.	SITC of 30KW 3PH ACDB with Inbuilt AC MCB 63A, AC SPD 320V & phase Indicator (R, Y, B), IP65 or better, dustproof and anti-corrosion heat resistant solar combiner wall mount box. (Qty 1Nos + 1 Nos. spare = 2Nos.)	2		Nos.	
3.	SITC of Solar DC cables IS17293:2020 std, XLPO (Cross-Linked Polyolefin) TUV Protected 6Sq.mm Cables (Red and Black), low conductor resistance, TIN plated conductor, double layered XPLE/ PVC, anti-corrosive, Voltage Rating: 1.5(1.8) KV DC 300meter (150mPositive + 150mNegative =300meter) x 6string = 1800 meter + 200meter interconnection wiring = 2000meter + 200meter Spare = 2200meters.	2200		meter	
4.	SITC of 30KW Solar Grid Inverter, Maximum DC Input Power / Overload Capacity 32 KW, Rated Voltage DC 1050 Volt, Maximum DC Voltage 1100V, 2 Nos. of MPPT, Ingress protection IP 65 or better, LCD Display, Monitoring and configuration facility, forced air cooling, salient features like Over temperature, Power switch DC side, Overvoltage AC, Over voltage DC, Communication Port.	1		No.	
5.	Supply of MC4 (male and female) Solar Connector for DC connection suitable for 6Sq.mm cables, high quality PPO+PA material, UV resistance, waterproof and anti-flame. For 8 Set of 50 pairs (total 400 Nos.)	8		Set	
6.	SITC of Solar PV Module/ Panel, 250W or more, Class-A, polycrystalline Silicone Terrestrial (03 Nos. for replacement and 03 Nos. spare = Total 06Nos.	6		Nos.	
7.	Supply of Solar MC4 professional crimping tool with MC4 wrench spanner.	2		Nos.	
8.	Supply of AC/DC Clamp Meter, AC Voltage Range 600V or better, DC Voltage Range 1000V or better, AC Current range 1000A or better, DC Current range 1000A or better.	1		No.	
9.	IoT (Internet of Things) Device for monitoring Solar Generation, compatible with Delta Inverter M30A, supporting RS-485 communication, GSM and WIFI connectivity including purchasing of SIM (01 No.) with recharge for 03 years (Device rate+03 years recharge)	1		No.	
10.	Supply and laying of following size DWC HDPE (Double Wall Corrugated High Density Polyethylene pipe) ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.in the existing trench, complete as required 63mm dia (OD-63 mm & ID-51 mm nominal)	115		Meter	

11.	Supply of 63mm UPVC Pipe with necessary bends for routing cables from HDPE pipe to inverter and interconnecting strings	20		Meter	
12.	Excavation of the cable trenches in soft soil 120L x 0.3W x 0.3H, including getting out the excavated soil, refilling with excavated soil after laying of cable/pipe as directed. Total excavation work area: Solar Panel Strings to power house = 120m Work to be executed: 120L x 0.3W x 0.3H = 10.8cum Say 11cum	11		cum	
13.	SITC of Solar powered Aviation obstruction Light with 360 Illumination by high intensity Red LEDs, Input Voltage: Solar Panel 12VDC, rating of IP 66 or better, sealed waterproof, Casing made of S.S painted with UV paint for atmospheric protection (03 Nos. for installation at the tower and 01 No. for spare)	4		Nos.	
14.	SITC of Commercial High-Pressure Washer with 2200W, 200-300 Bar, minimum capacity of 16L or better, trolley included.	2		Nos.	
15.	Supply of Silver Grey exterior metallic paint for painting the frames of solar Structure	LS		LS	
16.	Painter hire for painting the frames of the solar structure at Navinal VTS station	1		Job.	
17.	Breaking of RCC road (approx. 3mtrs) crossing for laying 60mm HDPE pipe and its refilling charges of channel including material cement, sand, water for mixing of concrete and curing, labour charges etc. (Including breaker, operator & mason/ labour charges)	L.S		Job	
18.	a) Connecting 120 Nos. of existing solar panels serially in to 6 Nos. of strings with Solar DC Cables and removing 03 nos or more (as per requirement, max upto 06 nos.) defective solar panels and installing 3 Nos. or more Solar Panels (as per requirement, max upto 06 nos.), mounting on the existing frame properly with SS fittings only, appropriate lugs and fittings. b) Connecting the solar DC cables to existing On-grid Solar Inverter, fixing of cable tray on wall for proper routing with appropriate lugs and fittings.	L.S		Job	
19.	a) Fixing of 4 Nos. of 2 in 2 out DCDB at the solar panel strings with proper SS nut bolts, copper clamps, appropriate lugs and fittings. b) Fixing and mounting of ACDB and connecting with the existing inverter with proper mounting accessories and cabling. c) Tagging the strings and boxes by labelling properly long-lasting stickers/PV labels d) Sealing the opening of HDPE and UPVC pipe opening with proper sealants. e) 2inch Painting Brush-2Nos for painting work, any other work required to complete the work in all respect.	L.S		Job	
20.	Supply and laying of (Yellow/ Red painted) RCC marker of 0.3 mtrs height or better for cable trench marking, laying 2 meters gaps from Strings to Power house. (min qty 50 Nos.)	L.S		Job	
21.	Fixing of 03 Nos. aviation obstruction light with solar module on the top of the 60mtr tower including SS fixing accessories, complete work	L.S		Job	

Note: Rates shall be submitted in GeM financial bid only. If the rates are found submitted in technical bid, same shall be rejected.

PERFORMA FOR DECLARATION OF COMPLIANCE

(On letter head of the firm)

Date:

It is to declare that the Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS Station in the bid (bid no.) _____ dated _____, fully complies with the required technical specifications as mentioned in Clause 7.1.

We are aware that in case of absence or deviation of even one specification, our bid may be rejected.

Name of work: Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS Station					
BoQ No.	Description of Item	Specification as per tender clause	Offered Make	Offered Model	BIS/ISI certified YES/ NO
1	SITC of 2 in 2 out 1000V DCDB, 32A DC Fuse, 1000V SPD and 30A DC MCB in the 2X string having 20 Nos. of panels in each string, IP67 or better standard (Qty 4Nos + 2 Nos. spare = 6Nos.)	7.1			
2	SITC of 30KW 3PH ACDB with Inbuilt AC MCB 63A, AC SPD 320V & phase Indicator (R, Y, B), IP65 or better, dustproof and anti-corrosion heat resistant solar combiner wall mount box. (Qty 1Nos + 1 Nos. spare = 2Nos.)	7.1			
3	SITC of Solar DC cables IS17293:2020 std, XLPO (Cross-Linked Polyolefin) TUV Protected 6Sq.mm Cables (Red and Black), low conductor resistance, TIN plated conductor, double layered XPPE/ PVC, anti-corrosive, Voltage Rating: 1.5(1.8) KV DC 300meter (150mPositive + 150mNegative =300meter) x 6string = 1800 meter + 200meter interconnection wiring = 2000meter + 200meter Spare = 2200meters.	7.1			
4	SITC of 30KW Solar Grid Inverter, Maximum DC Input Power / Overload Capacity 32 KW, Rated Voltage DC 1050 Volt, Maximum DC Voltage 1100V, 2 Nos. of MPPT, Ingress protection IP 65 or better, LCD Display, Monitoring and configuration facility, forced air cooling, salient features like Over temperature, Power switch DC side, Overvoltage AC, Over voltage DC, Communication Port.	7.1			
5	Supply of MC4 (male and female) Solar Connector for DC connection suitable for 6Sq.mm cables, high quality PPO+PA material, UV resistance, waterproof and anti-flame. for 8 Set of 50 pairs (total 400 Nos.)	7.1			
6	SITC of Solar PV Module/ Panel, 250W or more, Class-A, polycrystalline Silicone Terrestrial (03 Nos. for replacement and 03 Nos. spare = Total 06Nos.	7.1			
7	Supply of Solar MC4 professional crimping tool with MC4 wrench spanner.	7.1			
8	Supply of AC/DC Clamp Meter, AC Voltage Range 600V or better, DC Voltage Range 1000V or better, AC Current range 1000A or better, DC Current range 1000A or better.	7.1			

9	IoT (Internet of Things) Device for monitoring Solar Generation, compatible with Delta Inverter M30A, supporting RS-485 communication, GSM and WIFI connectivity including purchasing of SIM (01 No.) with recharge for 03 years (Device rate+03 years recharge)	7.1			
10	Supply and laying of following size DWC HDPE (Double Wall Corrugated High Density Polyethylene pipe) ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.in the existing trench, complete as required 63mm dia (OD-63 mm & ID-51 mm nominal)	7.1			
11	Supply of 63mm UPVC Pipe with necessary bends for routing cables from HDPE pipe to inverter and interconnecting strings	7.1			
12	Excavation of the cable trenches in soft soil 120L x 0.3W x 0.3H, including getting out the excavated soil, refilling with excavated soil after laying of cable/pipe as directed. Total excavation work area: Solar Panel Strings to power house = 120m Work to be executed: 120L x 0.3W x 0.3H = 10.8cum Say 11cum	7.1			
13	SITC of Solar powered Aviation obstruction Light with 360 Illumination by high intensity Red LEDs, Input Voltage: Solar Panel 12VDC, rating of IP 66 or better, sealed waterproof, Casing made of S.S painted with UV paint for atmospheric protection (03 Nos. for installation at the tower and 01 No. for spare)	7.1			
14	SITC of Commercial High-Pressure Washer with 2200W, 200-300 Bar, minimum capacity of 16L or better, trolley included.	7.1			
15	Supply of Silver Grey exterior metallic paint for painting the frames of solar Structure	7.1			
16	Painter hire for painting the frames of the solar structure at Navinal VTS station	7.1			
17	Breaking of RCC road (approx. 3mtrs) crossing for laying 60mm HDPE pipe and its refilling charges of channel including material cement, sand, water for mixing of concrete and curing, labour charges etc. (Including breaker, operator & mason/ labour charges)	7.1			
18	a) Connecting 120 Nos. of existing solar panels serially in to 6 Nos. of strings with Solar DC Cables and removing 03 nos or more (as per requirement, max upto 06 nos.) defective solar panels and installing 3 Nos. or more Solar Panels (as per requirement, max upto 06 nos.), mounting on the existing frame properly with SS fittings only, appropriate lugs and fittings. b) Connecting the solar DC cables to existing On-grid Solar Inverter, fixing of cable tray on wall for proper routing with appropriate lugs and fittings.	7.1			
19	a) Fixing of 4 Nos. of 2 in 2 out DCDB at the solar panel strings with proper SS nut bolts, copper clamps, appropriate lugs and fittings. b) Fixing and mounting of ACDB and connecting with the existing inverter with proper mounting accessories and cabling. c) Tagging the strings and boxes by labelling properly long-lasting stickers/PV labels. d) Sealing the opening of HDPE and UPVC pipe opening with proper sealants e) 2inch Painting Brush-2Nos for painting work f) Any other work required to complete the work in all respect.	7.1			
20	Supply and laying of (Yellow/ Red painted) RCC marker	7.1			

	of 0.3 mtrs height or better for cable trench marking, laying 2 meters gaps from Strings to Power house. (min qty 50 Nos.)				
21	Fixing of 03 Nos. aviation obstruction light with solar module on the top of the 60mtr tower including SS fixing accessories, complete work	7.1			

Seal & Signature of the Bidder

Date.....

PROFORMA FOR TENDER ACCEPTANCE LETTER
(On letter head of the firm)

Date:

To

The Deputy Director General
Directorate of Lighthouses & Lightships
“Deep Bhavan”, Sector-8, Plot No.17 Gandhidham-370201

Sub: Acceptance of Terms & Conditions of Tender

Tender Reference No: _____

1. We have downloaded / obtained the tender document(s) for the above mentioned “Tender/work” from the web site(s) namely:

_____as per your advertisement, given in the above-mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like Form(s), schedule(s), etc.), which shall form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document/ corrigendum(s) in its totality / entirety.

5. In case any provisions of this tender are found violated, then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full earnest money deposit absolutely.

6. I / We hereby unconditionally indemnify and keep indemnified the Deputy Director General (DDG), his authorised representatives, officers, engineers, employees and other officials of the Department against all claims, demands, proceedings, damages, losses, costs, charges and liabilities arising out of or in connection with any accident, incident, injury, disability or death of the Contractor’s employees, labourers, engineers, supervisors, agents, authorised representatives or any other person engaged by or through the Contractor in connection with the execution of the work.

Yours faithfully,

(Signature of the Bidder, with Official seal)

Performa for Not-Black listing
Non-Blacklisting declaration
(To be given on Company Letter Head)

Date:

To,

Sub: Declaration for Non-Blacklisting

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

We hereby declare that we are not blacklisted by any Central/ State Government/ bidder of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities.

Yours faithfully,

(Signature of the Bidder,
with Official Seal)

UNDERTAKING

(On letter head of the firm)

Name of Tender/Work: “Replacement of defective DC solar cables, ACDB, procurement of DCDB and other Electrical items for Navinal Lighthouse and VTS Station”

We, M/s. _____ (Agency Name), hereby declare and confirm that we are fully aware of the location of the work at Navinal VTS & Lighthouse Station, Adani Port, Mundra, Dist. Kutch, Gujarat – 370421 and have thoroughly examined, inspected and assessed the site and its surrounding conditions before submitting our quotation.

We further confirm that we have carefully studied and understood the complete scope of work, specifications, quantities, site requirements and other conditions relevant to the proposed work. We have made a proper and realistic assessment of the nature and extent of work involved, including the site conditions, accessibility, working conditions, availability and handling of materials, manpower requirements, tools and plants, transportation, loading and unloading, shifting of materials, safety requirements, disposal of debris/waste materials and all other incidental activities necessary for satisfactory and complete execution of the work.

We confirm that the rates submitted by us have been worked out after taking into consideration all the above factors and prevailing site conditions. We further undertake that no additional cost, extra payment, escalation, compensation or reimbursement of any nature whatsoever shall be claimed by us at a later stage on account of inadequate assessment of the site, working conditions, accessibility, logistics, manpower, material handling, transportation or any other factor which could reasonably have been assessed prior to submission of the quotation.

We confirm that this undertaking is submitted voluntarily and shall form an integral part of our offer and shall be binding on us throughout the execution of the work.

(Seal of the Company)

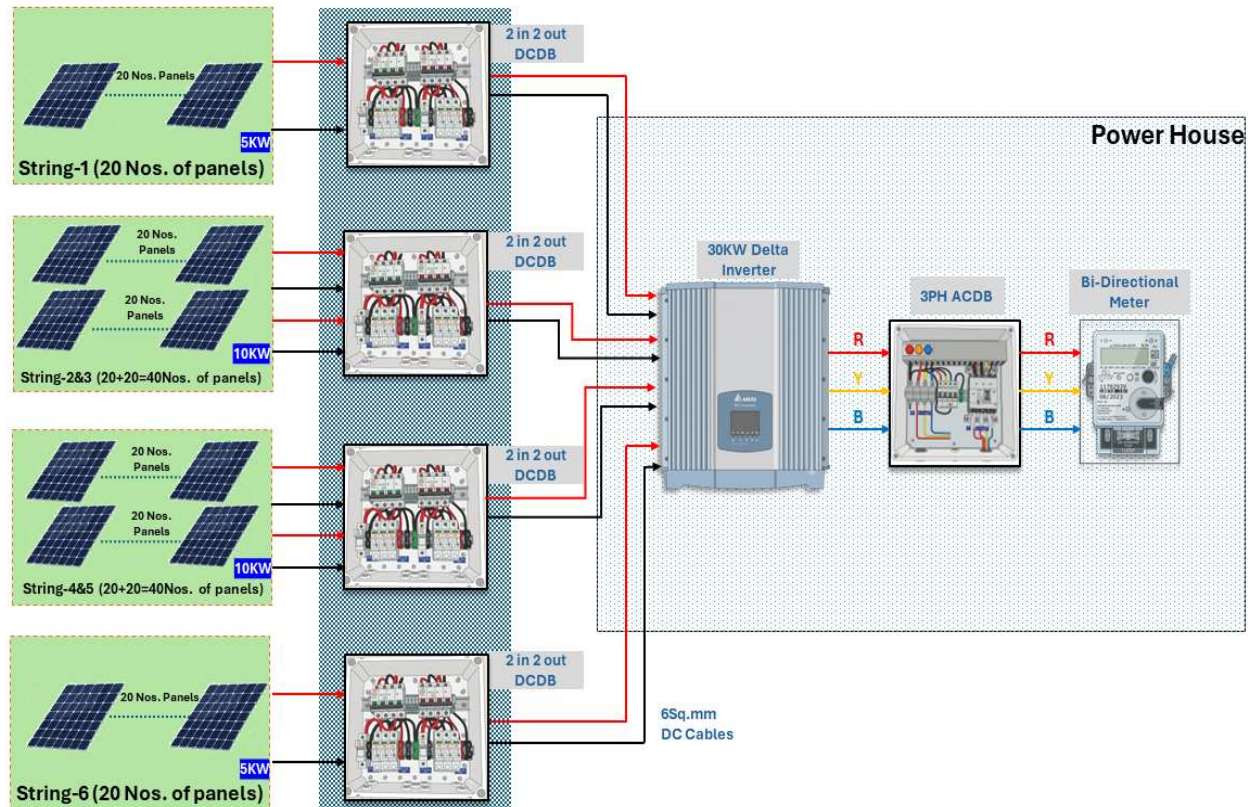
Date.....

Signature of the bidder or his Authorised signatory_____

Place.....

Name of the bidder (or his Authorised signatory_____

Cable Layout and Connection Diagram



Cable Layout Measurement

