

PROJECT TITLE	OVERALL PAGE
SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING SYSTEM IN CAPTIVE POWER PLANT, ANGUL, ODISHA	1 of 20

**NOTICE INVITING EXPRESSION OF INTEREST
FOR
SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED
INTEGRATED RAKE TRACKING SYSTEM IN CAPTIVE POWER PLANT, ANGUL, ODISHA**

National Aluminium Company Limited (NALCO), a Navratna CPSE under Ministry of Mines, invites Expression of Interest (EOI) from Indian vendors for the titled project. For more information please visit <http://www.nalcoindia.co.in> or www.eprocure.gov.in. Interested vendors may submit their Expression of Interest on or before 23/04/2020 by 13:00 hours (IST) at the following address by post/courier.

GM(Materials)I/c
Purchase Deptt
Captive Power Plant, NALCO
Angul,- 759145
Odisha

The EOI can also be sent by e- mail to mrutvunjaya.sahoo@nalcoindia.co.in
CC: kali.pandey@nalcoindia.co.in
Bidyadhar.giri@nalcoindia.co.in

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Part I: Information to Vendors

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TITLE: INVITATION FOR EXPRESSION OF INTEREST FOR SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING SYSTEM IN CAPTIVE POWER PLANT, ANGUL, ODISHA

1.0 INTRODUCTION

National Aluminium Company Limited (NALCO), a Navratna CPSE under Ministry of Mines, referred to herein as “NALCO”, invites Expression of Interest (EOI) from interested vendors For **Supply, Installation, Operation And Maintenance of GPS & GPRS Based Integrated Rake Tracking System** for its Captive Power Plant located at Angul in the state of Odisha. The EOI is open to Indian vendors.

2.0 BRIEF ABOUT NALCO:

National Aluminium Company Limited (NALCO) is one of the largest Aluminium and Alumina producers in India having its Corporate Office at Bhubaneswar and Alumina Refinery & Bauxite Mines at Damanjodi in the state of Odisha, India. Mines Division is the captive bauxite mine of NALCO situated on Panchpatmali hills at an elevation of 1300m above mean sea level near Damanjodi, in the district of Koraput, Odisha state, India. The mines have a capacity to produce 68.25 Lakh Tons per Annum of Bauxite. The bauxite is transported through hilly terrain by Cable Belt Conveyor System and then fed in Alumina refinery plant at Damanjodi for purification. The process of extraction of Alumina from its mineral bauxite in caustic liquor solution is commonly known as ‘Bayer's Process’. Nalco's Alumina Refinery, having a capacity of 22.75 Lakh Tons per Annum, is the lowest cost Alumina producer in the world, as per Wood Mackenzie report. The alumina produced is used to meet Company's requirement for producing primary aluminium at its Smelter Plant, located at Angul, Odisha and the surplus alumina is exported to overseas market. Nalco's Smelter Plant, having a capacity of 4.6 Lakh Tons per Annum Alumina is converted into primary aluminium through a smelting process by using AP18 smelting technology. The plant has integrated facilities for manufacturing standard and alloy ingots, T-ingots, billets, wire rods, rolled products and chequered sheets. The product is sold in domestic/ international market. To meet the power demand of the Smelter Plant, NALCO has its own Captive Power Plant, 10X120 MW capacities at Angul.

More details on NALCO can be viewed on company's website www.nalcoindia.com.

3.0 OBJECTIVE OF EXPRESSION OF INTEREST (EOI)

Nalco is having its own Captive Power Plant to meet requirement of the power requirement of Smelter Plant and Refinery plant. Nalco usually gets its Coal for the Power Plant from Mahanadi Coal Fields (MCL) through the Merry-go-round (MGR) railway track connecting MCL and Nalco. Besides this, Nalco is also sourcing coal from various sources through e-auction and getting the delivery of coal up to Budhapank Railway station of the Indian Railway (IR). In order to collect the coal from Budhapank Railway station which is approximately 10KM away from Nalco's Captive Power plant, Nalco is using their own locomotives. Nalco is having 10 locomotive for Captive Power Plant, in which we wanted to install solution for handling locomotive tracking requirement on real-time basis.

Through this EOI, NALCO intends to finalise the Term of Reference (TOR) of the project for subsequent tendering action based on discussion with / feedback from the participated vendors.

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4.0 CONTACT PERSON DETAILS

Sl. No.	Item	Description
1.0	Project Title	SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING SYSTEM IN CAPTIVE POWER PLANT, ANGUL, ODISHA
2.0	Contact Person(Technical)	Shri Kali Pandey, AM(Systems)- Primary Contact kali.pandey@nalcoindia.co.in Cell No: 9437563832 ----- Shri Bidyadhar Giri, DGM(System)- Secondary Contact Bidyadhar.giri@nalcoindia.co.in Cell No: 9437077040
	Contact Person(Commercial)	Shri Mrutyunjaya Sahoo, AGM (Materials) <u>mrutyunjaya.sahoo@nalcoindia.co.in</u> Cell No: 9437025690
3.0	EOI Submission Address	By Post/Courier GM(Materials)I/c, CPP Purchase Deptt Captive Power Plant, NALCO Angul,- 759145 By e mail: <u>mrutyunjaya.sahoo@nalcoindia.co.in</u> cc: kali.pandey@nalcoindia.co.in Bidyadhar.giri@nalcoindia.co.in

5.0 AVAILABILITY OF THE EOI DOCUMENTS

EOI can be downloaded from the NALCO's website <http://www.nalcoindia.co.in>. EoI documents are also available in the website www.eprocure.gov.in. The VENDORS are expected to examine all instructions, forms, terms, project requirements and other details in the EOI documents. Failure to furnish complete information as mentioned in the EOI documents or submission of a proposal not substantially responsive to the EOI documents in every respect will be at the VENDOR's risk and may result in rejection of the proposal.

6.0 MODE OF SUBMISSION OF PROPOSALS

Interested vendors have to submit their Expression of Interest by Speed Post/ Courier in a sealed cover or by e-mail to : mrutyunjaya.sahoo@nalcoindia.co.in

cc: kali.pandey@nalcoindia.co.in , Bidyadhar.giri@nalcoindia.co.in .

The necessary documents along with the covering letter duly signed by an authorized signatory must reach the above mentioned address or e mail on or before Dt23.04.2020 by 13:00 hours(IST) .

NALCO may, in exceptional circumstances and at its discretion, extend the deadline for submission of proposals by issuing an addendum to be made available on the NALCO's website, in which case all rights and obligations of NALCO and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

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Part II: Term of Reference for the Project

The Term of Reference (TOR) given below is for enabling the bidder to submit their response for EOI. This TOR in no case is to be presumed as final for Request for Quotation (RFQ).

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Introduction:- Nalco is having its own Captive Power Plant to meet requirement of the power requirement of Smelter Plant and Refinery plant. Nalco usually gets its Coal for the Power Plant from Mahanadi Coal Fields (MCL) through the Merry-go-round (MGR) railway track connecting MCL and Nalco. Besides this, Nalco is also sourcing coal from various sources through e-auction and getting the delivery of coal up to Budhapank Railway station of the Indian Railway (IR). In order to collect the coal from Budhapank Railway station which is approximately 10KM away from Nalco's Captive Power plant, Nalco is using their own locomotives. Nalco is having 10 locomotive for Captive Power Plant, in which we wanted to install solution for handling locomotive tracking requirement on real-time basis.

Present Operational Process:-

After receiving the rake from railways at Budhapanka Railway station, there are 47 events (Milestone) in the entire transportation of a Coal rake from Budhapanka (BDPK) Railway station to CHP (Coal Handling Plant of CPP Unit) and transporting the empty rake back to BDPK. The process deals with monitoring of all the events which incorporates date and time of the events and if there is any delay in the events the reason for so is depicted in remarks.

Nalco has to return rake back to railways within four and half hours after receiving rakes from railways otherwise railway charges demurrage to Nalco on the basis of delay (other than four and half hours) and no of wagon in each rakes.

Based on the date and time of all 47 events the demurrage of one trip (one rake) is calculated based on the wagon count of the rake. Demurrage calculation logic is clear and will be provided during development of solution.

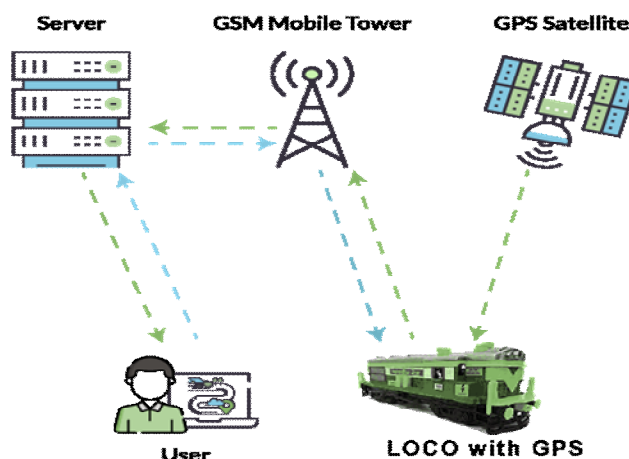
Required Solution:-

In the required solution a GPS device will be installed in each of our locos and a Communication Server will be installed in our premises at Captive Power Plant, Angul, Odisha. Each GPS device will continuously send its location (longitude and latitude) and current date time to communication server which will be stored in database server.

There will be requirement of date time of all 47 events for demurrage calculation of a rake (trip). Date time of some event which depend on location will be available in GPS location database and date time of remaining events will be entered manually through web application or mobile apps.

The proposed solution is scalable, real-time tracking, and fleet management solution that caters for NALCO requirements and needs in monitoring the fleet of vehicles (Train) inside Angul, Odisha. The proposed solution covers all aspects of a monitoring and tracking system from collecting data received from trains to the processing and crunching of the gathered data and viewing the trains on client's side application. The following figure presents the overall conceptual monitoring and tracking solution.

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As shown in the figure above, the solution comprises of several components. One of the components is the in-train tracking units that are installed in the trains. Those tracking units communicate with the GPS satellite to retrieve the current position of the train. This information, in addition to the train's sensors readings that are connected to the tracking unit, is sent back to the server through GPRS/EDGE over the wireless network, provided by the telecom operator in Angul, Odisha, to be duly processed and analyzed. This whole process is performed seamlessly and without the driver intervention until the data reaches the data center at NALCO / Client location. The data center is equipped with the various systems and modules that facilitate the processing of received data from the train and generates understandable and helpful information to be used and consumed by all the monitoring and tracking system modules.

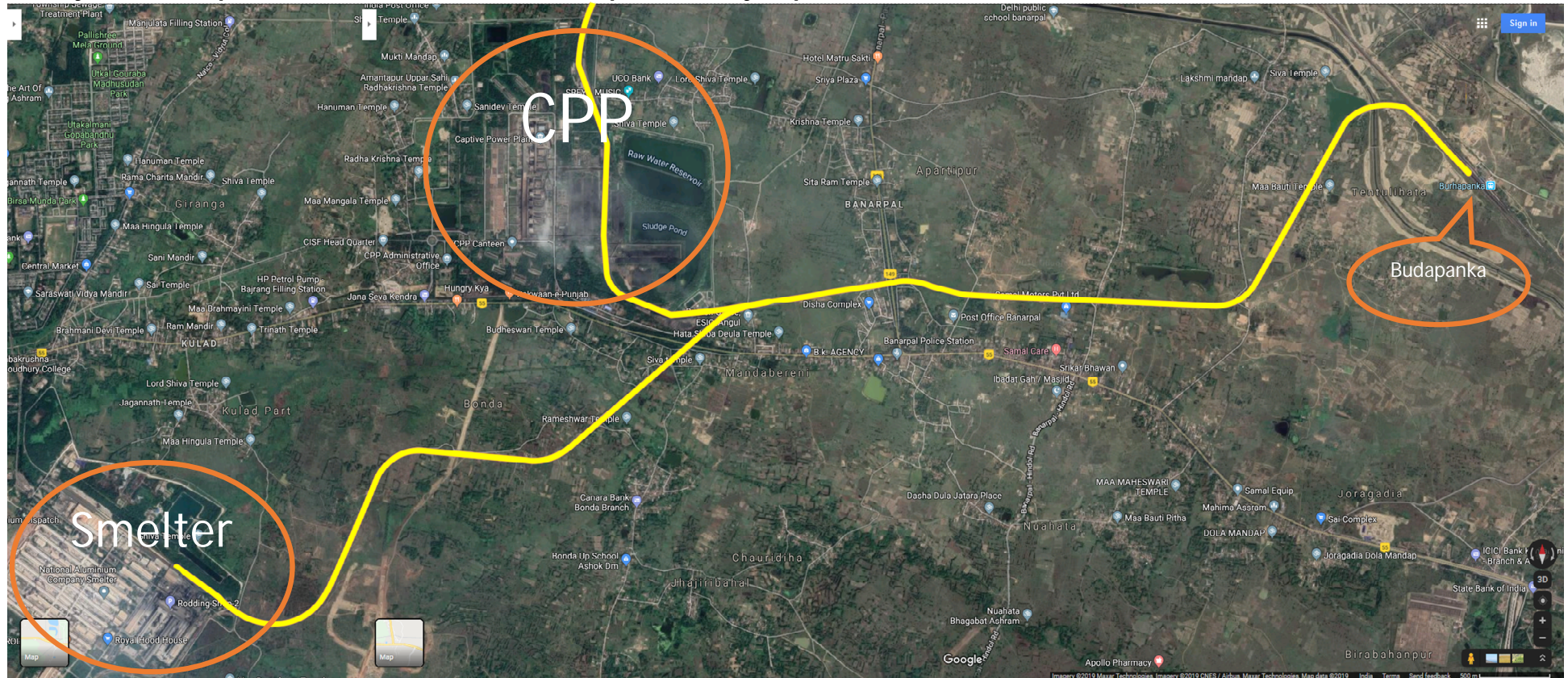
When the device is installed at the trains and a full device configuration is done, the in-train device will be sending the collected information from the device to the monitoring and tracking System servers for processing to be ready for Client operator's usage.

The employees at Client operation center will track and monitor the entire train's activities by using their client application;

Each operator will have a workstation with the following screens:

- **MAP Screen:** The map screen will show a real time overview of the trains on a base map for the required area of interest.
- **Report Screen:** The report screen will give the ability to for client operators to access the system historic data by reporting and history replay applications
- **Demurrage Screen:** The Demurrage screen will give dashboard for management to view real time demurrage charges of rakes which are in motion and the projection of demurrage charges.

Railway Line from Captive Power Plant and Smelter to Budapanka Railway Stop



1. Scope of Work

The Scope of Work shall broadly comprise the following activity:

- A. Supply and Installation of GPS system in Locos
 - 1) Monitoring/Tracking Locos for one year during warranty period and 5 years after completion of warranty period as part of AMC.
 - 2) The solution provider shall supply GPS Devices with dual SIM/Data cards for enabling GPRS on the GPS Device for Coal Rake Tracking. Monthly recurring charges for the same will be paid by supplier for warranty period of one year and later on Annual charge basis for further period of 5 years. GPRS devices are required to hold data for at least 60 days.
 - 3) Monitoring of Routes and Stoppages of Locos and keeping a record of the trip they have made route wise and locos wise.
 - 4) Web based application Software with hosting services, SMS gateway and Google maps.
 - 5) The solution provider shall provide off the shelf Web based Vehicle Tracking Software and customize the same as per the requirements of NALCO to operate and maintain the GPS based Coal Rake Tracking devices installed in Locos.
 - 6) The solution provider should develop a customized application to calculate the demurrage in real time basis for a rake movement. Logic to calculate demurrage should be provided by Nalco during development.
 - 7) The solution provider shall install the GPS devices in all the Locos within the time frame set by NALCO. The reports generated from system should be sufficient to calculate the performance of the entire system and penalties as prescribed.
 - 8) It is assumed that the entire Rail track of a Locos is covered by GPS and leading mobile network. But there might be some parts of the route where there is no network coverage. So the system must work in off-line mode too for these areas and will provide the data once the vehicle enters in the GPRS zone.
 - 9) The solution provider shall be responsible for updating and upgradation (if required) of all Software and Hardware for successful operation of the Project during the Contract Period. Nalco would be eligible to demand free upgrades as and when they are launched within the contract period.
 - 10) All data generated during the operation period shall be the property of Nalco and should be stored in Nalco's Database server. Access to all tables in the database server at Nalco will be provided by the service provider.
 - 11) The solution provider has to share the API/data/ specific MIS as per the requirements of Nalco without any additional charges.
 - 12) All the supporting accessories and associated software, monitoring dashboard will be provided by the solution provider and apart from the quoted in the financial proposal, no other cost will be entertained by the Nalco thereafter.
 - 13) The rate of unit device is valid for one year from the date of work order. Nalco may procure additional devices on the specified rates.

2. Deliverables

The solution provider shall deliver / provide the following:

- 1) Hardware –GPS Device, internal battery, internal antenna.
- 2) Web based Application Software with hosting services, SMS gateway and Google maps.
- 3) User Manuals.
- 4) Training to Nalco Staff
- 5) MIS reports as per defined format to be developed in ASP.Net.
- 6) Mapping of Stoppages, Routes and Parking Areas.
- 7) Monthly operation and maintenance.
- 8) Man power in Captive Power Plant at initial stage of project maximum up to six month.
 - a) GPS-VTS
 - b) Capturing latitudes, longitudes of Stoppages, Routes and Parking Areas.
 - c) Geocoding and Geofencing of Stoppages, Routes and Parking Areas.
 - d) Route fixing
 - e) GPS device installation
 - f) SMS/E mail based Alerts
 - g) Customized MIS reports
 - h) Real time location monitoring
- 9) Functional Requirement:
 - a) Tracking of Coal Rake
 - i) Supply and Installation of GPS Devices: The solution provider shall install GPS trackers (with inbuilt GPRS module) in Locos and manage the tracking of entire fleet operations on real time basis. The Solution provider shall replace non- functional/faulty device in given time limit from registering of complaint with new device during the contract period. Technical specifications are mentioned in the document.
 - ii) Trip Tracking: The system shall track each and every Locos carrying the Rakes from Source to destination. The tracking shall be real time and web based. Entire set of applications and their features shall allow secure web based online access to obtain real time information. The secure access shall be provided through popular browser interfaces.
 - iii) Tampering Alert: In case of tampering of any equipment, component of vehicle tracking system etc., alert should be given through SMS/ On-screen Pop Up Alert with Sound on about 4 to 5 relevant Mobile Nos. or as suggested by RMC.
 - iv) Route Excess Stoppage Alert: In case of vehicle excess stoppage of vehicle beyond a specified time duration alert should be given through SMS on about 4 to 5 relevant Mobile Nos. or as suggested by Nalco.
 - b) Demurrage Calculation
 - i) A customized application will be developed to calculate the demurrage of a rake movement. All date time of 47 event of a rake movement should be stored in data base.
Date time of some events will be picked from GPS tracking data of locos which is associated with the rake and date time of some events need to be entered through one of application interface (Web application, Mobile app).
 - ii) Real time demurrage calculation should be shown on dashboard of user.
 - iii) A SMS alert should be sent based on future projection of demurrage
 - iv) Intimation SMS should be sent to concert person for upcoming event.

c) WEB based Vehicle Tracking Software

- i) Nalco will provide Hardware server along with window server license and SQL server license.
- ii) The Application Software should be hosted by the solution provider at Captive power plant, during warranty and AMC period having all the administrative rights and access to the RMC.
- iii) The offered application software product should be readily available (off the shelf) and should be able to deliver and start implementation within the specified time frame as mentioned in this RFP.
- iv) Geographical Boundaries of State, District, Block, and village will be as per the present scenario and will have to update the boundaries if new administrative entities are created by the government.
- v) Point data relevant to Source and destination
 - vi) Real time report of the movement of the GPS enabled vehicles on the map to the users based on their privileges.
 - vii) The solution provider shall maintain a dynamic reporting system. The solution provider is also expected to provide following customized report as per requirements of Nalco.
 - (a) Real-time GPS tracking of locomotive.
 - (b) Intimation alert on the completion of event.
 - (c) Monitoring of Routes and Stoppages.
 - (d) Route Time Deviation/Excess Stoppage Alert.
 - (e) Estimating time-to reach to the destination based on milestones.
 - (f) Entry of the journey start/stop.
 - (g) Demurrage calculation in real time.
 - (h) Demurrage alert based on start/stop time of the journey.
 - (i) Intimation alert for upcoming events.
 - (j) Tracking of idle time and alert generation.
 - (k) Solution will support mobile app (Android, ios) and web based access
 - viii) Dynamic Route Management: Must be able to create and assign routes based on the landmarks and stoppages with option to assign single or multiple Rakes on the route created.

d) Mobile Application

- i) Real time monitoring of Locos
- ii) Data entry of date time for specified event for a rake movement
- iii) Real time demurrage report of a rake movement
- iv) Trip Reports
- v) The source code of the APP (Android / ios) will be sole property of Nalco and will have to be handed over to Nalco once the project is completed.
- e) Training

Solution provider shall provide a training manuals and user guides for the system. The Solution provider shall also provide the training on GPS device and Tracking system to approx. 8-10 users/officials at Nalco. Solution provider shall develop a training plan that ensures all users of the system receive sufficient training to successfully

operate the system. User department will provide the space for training with other logistic arrangement such as Laptop, projectors, internet connectivity etc.

f) Comprehensive Maintenance and Support Service

Solution provider has to supply, operate and maintain all the items covered in the scope of this tender during contract period. Comprehensive maintenance service includes modification of application software, parts and service/repair work/replacement of GPS device(s) should be done by the solution provider without any additional charge. In case the supplied items are down and not working, the service provider should attend to the breakdown call/s within 24 Hours and rectify the problem/s of minor nature (configuration etc.). If the problem is of critical and major and where the item/spare parts are to be replaced for rectification of any part/problem the call shall be completed within 48 Hours from the time of reporting the call, failing which penalty will be recovered from monthly payment and/or from the Performance Security. In addition to attending to the Service/Corrective Calls, the solution provider shall conduct Preventive Maintenance once in every month for all the items supplied / covered in the scope of work. The Solution provider must have a complaint redressal system and centralized contact no to register the complaint about hardware/software issues and will also maintain a log of issues, time and date of receipt of call, cause / nature of problem, date & time of resolution provided etc. The details of complaint redressal system will be provided by the solution provider to the User department during implementation of the project. The solution provider shall also set up a command and control system at RMC office and deploy a Project Manager to assist the department and monitor the project for entire period of contract without any additional cost to the user department.

g) Roles and Responsibilities of the Solution Provider

- i) Understanding the scope of the work.
- ii) Entering into agreement with Nalco duly submitting the performance guarantee
- iii) To provide software and manpower for successful implementation /completion of project.
- iv) To implement the project with his own men and material by developing required software and also insuring all men, machines and material against all risks.
- v) Backup of data from time to time

3. Annual Maintenance

- a) Repairing maintenance and reporting for period of 5 years after completion of the Warranty/Guarantee period. The supplier will have to repair/ replace and maintain the supplied and installed GPS equipment for a further period of five years after the completion of warranty/guarantee period.
- b) The service provider shall keep the device functional (all bill and internet charges has to be borne by the supplier) and should provide all the required reports/ data and information to RMC as and when required. AMC for this project includes all types of expenses on VTS devices like device and software maintenance including Report development (Max 3 Reports per Year), data charges, device replacement charges (in case of non-functioning of the device), application hosting charges, SMS alert charges etc.

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Part III: Special Terms & Conditions of EOI

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1. CONDITIONS UNDER WHICH THIS EOI IS ISSUED

- i. This EOI is not a commercial offer and is issued with no commitment.
- ii. NALCO reserves the right to withdraw this EOI if NALCO determines that such action is in the best interest of the organization.
- iii. The Term of Reference (TOR) given above is for enabling the bidder to submit their response for EOI. This TOR in no case is to be presumed as final for Request for Quotation (RFQ). Technical discussion may be held with short listed parties so as to decide upon the term of reference of the Project in line with the requirement of the project. Modalities and time for the discussion may be intimated to the short listed parties at a later date. Based on response, a more detailed and elaborate TOR will be prepared covering all aspect of the project.
- iv. Timing and sequence of events resulting from this EOI shall ultimately be determined by NALCO.
- v. No oral conversations or agreements with any official, or employee of NALCO shall affect or modify any terms of this EOI and any alleged oral agreement or arrangement made by a bidder with any department, official or employee of NALCO shall be superseded by the definitive agreement that results from this EOI process. Oral communications by NALCO to bidders shall not be considered binding on NALCO, nor shall any written materials provided by any person other than NALCO.
- vi. Neither the bidder nor any of the bidder's representatives shall have any claims whatsoever against NALCO or any of their respective officials or employees arising out of, or relating to this EOI or these procedures .
- vii. Each applicant shall submit only one proposal.

2. RIGHTS TO THE CONTENT OF THE PROPOSAL

For all the bids received before the last date and time of bid submission, the proposals and accompanying documentation will become the property of NALCO and will not be returned after opening of the pre-qualification proposals.

3. ACKNOWLEDGEMENT OF UNDERSTANDING OF TERMS

By submitting a proposal, each bidder shall be deemed to acknowledge that it has carefully read all sections of this EOI, including all forms, schedules and annexure hereto, Expression of Interest and has fully informed itself as to all existing conditions and limitations.

4. LANGUAGE OF PROPOSALS

The proposal and all correspondence and documents shall be written in English.

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5. Response Requirements

- i. The Response to the EOI Requirements shall be prepared in accordance with the requirements specified in this EOI document and in the format prescribed in this document .
- ii. Proposals must be direct, concise, and complete. All information not directly relevant to this EOI should be omitted.
- iii. The EOI submitted by post/courier shall be sealed and super scribed “ EOI for SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING” on the top right hand corner and addressed to NALCO at the address specified for bid submission in this document.
- iv. The EOI submitted by E-mail must be strictly addressed to the email addresses mentioned in EOI document.
- v. The proposal should contain the copies of references and other documents as specified in the EOI.
- vi. NALCO will not accept delivery of proposal in any manner other than that specified in this document or to any e mail address other than those specified in this document. Proposal delivered in any other manner shall be treated as defective, invalid and rejected.

6. CONTENT OF EOI PROPOSAL

The EOI Proposal should be submitted in the sealed envelope with the following details. Vendors are requested to submit their responses for the EOI clearly labeled according to the following categories:

- a. Form- I-Covering Letter

Covering Letter from the vendor as per the format provided in Annexure – Form I

- b. Form II – Details of the Organization

This part must include a general background of the respondent organization (limited to 400 words) along with other details of the organization as per the format provided in the EOI (Annexure – Form II).

- c. Form III – Financial Details of the Organization

The bidder must also provide the financial details of the organization as per format provided in the EOI (Annexure – Form III). Enclose the supporting documents listed in format.

- d. Form IV – Details of Existing system provided by vendor to other customers and proposed solution

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Formats for EOI submission

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Form- I

COVERING LETTER

(Company letterhead)

[Date]

To
GM(Materials)I/c, Purchase Deptt
Captive Power Plant, NALCO
Angul,- 759145
Odisha

Ref: Expression of Interest for **SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING SYSTEM IN CAPTIVE POWER PLANT, ANGUL, ODISHA**

Dear Sir,

Having examined the Notice inviting Expression of Interest (EOI), I/we, the undersigned, on behalf of our company intend to participate in **SUPPLY, INSTALLATION, OPERATION AND MAINTENANCE OF GPS & GPRS BASED INTEGRATED RAKE TRACKING SYSTEM** Project and the Expression of Interest (EOI) for the said project. We attach hereto the response as required by the EOI, which constitutes our proposal. Primary and Secondary contacts for our company are:

	Primary Contact	Secondary Contact
Name:		
Title:		
Company Name:		
Address:		
Phone:		
Mobile:		
Fax:		
E Mail:		

I/We confirm that the information contained in this response or any part thereof, including its exhibits and other documents is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead NALCO in its short-listing process. We fully understand and agree to comply that on verification, I/We also understand that incorrect information furnished in this process shall render the bid/ order liable for rejection at any stage of evaluation/ work execution. Our Company agrees for acceptance of all the terms and conditions set out in the EOI document. It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this.....Day of.....2020

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(Signature) and Seal of Company (In the capacity of) (Name)

Form- II

GENERAL DETAILS OF THE ORGANIZATION

Details of the Organization:

Name of organization :

Nature of business :

Date of Incorporation/Establishment:

Date of Commencement of Business:

Primary address of the Organisation:

Other addresses for business:

GSTIN NO. :

PAN NO. :

Other Relevant Information

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Form- III

FINANCIAL DETAILS OF THE ORGANIZATION

Financial Information			
	FY 2016-17	FY 2017-18	FY 2018-19
Annual Turnover			
Net Profit			
Net Worth			
Debt/Equity ratio			
Note: Audited Financial statements(P/L Statement and balance sheet) for the Last three financial years must be submitted			

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Form- IV

Details of Existing system provided by vendor and proposed solution

A) Details of existing system installed & operated by Vendor (if any).

B) Proposed system with reference to the Term of Reference of the project. Deviations or changes of the proposed system with the Term of Reference of the project may please be clearly brought out.

Note:

- 1.0 The vendor shall ensure that all information asked for is furnished and the same is correct and complete in all respect.
- 2.0 Vendor should mention the referred installations which are closely related to project requirement.
- 3.0 For the referred installations, the vendor may indicate the name of the user's contact person (along with his address, telephone no., fax no., e-mail id etc.) who may be contacted by NALCO, if necessary.
- 4.0 *Purchase Order Copy, Performance and completion certificates from the clients may be enclosed with this section.*

Vendor's Seal:

Signature of authorized
representative of Vendor with date:

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