

National Aluminium Co. Ltd.

[NALCO]

EXPRESSION OF INTEREST FOR DATA CENTRE CO-LOCATION SERVICES

Address for Communication

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INVITATION FOR EXPRESSION OF INTEREST

1. About NALCO

1.1 INTRODUCTION

National Aluminium Company Limited, (a Government of India Enterprise), is the largest integrated Aluminium Complex of Asia, capable of mining 63,00,000 TPA Bauxite, refining 21,00,000 TPA Alumina, smelting 4,60,000 TPA Aluminium and generating 1200 MW Captive Power. NALCO has its Registered/Corporate Office at BHUBANESWAR, the capital city of Odisha, which is well connected by air from major cities like, Delhi, Kolkata, Chennai, Mumbai, Bangalore, Hyderabad etc. The Mines and Refinery Complex is located on the



Eastern Ghats in Koraput District near Visakhapatnam Sea Port and the Smelter and Power Complex is located at Angul, 120Kms from Bhubaneswar adjacent to Talcher Coal fields. It is accredited with ISO 9001, ISO 14001, OHSAS 18001 and SA 8000 certificates besides registration of its Aluminium Ingots in London Metal Exchange.

2.2 About NALCO DATA CENTRE:

Business sensitive and mission critical systems such as ERP have to be matched with complementary site infrastructure that can support high availability goals.

A state-of-the art Data Centre has been setup by Nalco for ERP & IT services including Network Operation Centre (NOC). It is designed for 24X7 operation. Major civil items are 2 hours fire rated. A pair of 80KVA Uninterrupted Power Supply (UPS) configured in parallel redundant architecture provides 3-phase power with independent dual delivery path to each server with battery backup of 30 minutes.



This ensures non-stop data centre operation even when one UPS and battery bank is down for maintenance or repairs. In case of failure of incoming source, auto switchover to 140 KVA DG Set facilities is provided. To maintain stringent temperature of 21°C and humidity at 50% RH, adequate nos. of bottom discharge Precision AC have been installed on N+1 basis.

A raised floor of 18" in the server room acts as a supply air plenum thus eliminating ducts and simplifying electrical and data cabling under the floor. Conditioned air is supplied through floor grills with volume control. The Data Centre boasts of Green features such as the high density racks positioned in hot aisle and cold aisle fashion, full floor and ceiling insulation etc.



To protect the ERP servers from threat of fire, laser based Very Early Smoke Detection and Alarm (VESDA) system with FM200 gas based Suppression system have been installed.

To ensure security, access to the data centre is controlled through biometric technology for the server room and proximity technology to the NOC and Utility room. All movements in the data centre are monitored and recorded through CCTV,



An integrated Building Management System has also been implemented consisting of CCTV, Water Leak

detection System, Fire Alarm & Fire Suppression Systems, Access Control System and Rodent Control System. These will be used for constant monitoring (including SMS based alerts), control and protection of the data centre thereby ensuring a reliable and Always-Available IT service.

This data centre is located in the Corporate Office premises at P1, Nayapalli, Bhubaneswar. The city of Bhubaneswar is well connected with Point of Presence by all major Telecom Service Providers offering MPLS and Leased data circuits.



There is spare ready built data centre space available that can be leased to Corporates for setting up their IT hardware. Additional space can be developed and provided at the new data centre facility covering 5000sft being setup at NALCO, Bhubaneswar. The other Data Centre under development shall be provided at later date.

2.3 Co-location Services

NALCO offers a secure, environmentally conditioned hosting space for optimum performance of users' servers / IT equipment. Co-location service is a service relationship between NALCO and the user, in which users' servers/ IT equipment are housed in the facility of NALCO for a contracted period.

2.3.1 Security Management:

- Access to the Data centre is restricted by using authentication standards including Biometric cards
- Multiple layers of physical security with the availability of Biometric Access, CCTV located at all critical points, centralized security surveillance from automated building management systems.

2.3.2 Precision Environment:

- Advanced Cooling systems are used to provide precision cooling according to the requirements of the servers.
- VESDA (Very Early Smoke Detection and Alarming System) solutions with continuous air sampling with Advanced FM 200 Fire suppression system provide an automatic fire alarm capability and fire control capability.

- Reliability of power with the availability of UPS in (n+1) fashion with independent battery banks.
- o Backup power by DG for Servers & Precision AC with Automatic Mains Failover, designed to run uninterrupted in the event of power outage.

2.3.3 Performance:

o Availability of help desk which serves as the single point of contact for the user.

2.3.4 Other Features:

- Space shall be provided for termination of telecom circuits and installation of network equipment.
- o Internet / WAN Connectivity to IT equipment to be arranged from Telecom Service Providers by users.

2.3.5 CO-LOCATION ENVIRONMENT:

- Standard Dedicated Cabinet with Co-location space and 5 KVA rated power bundled is being offered. The standard allocation is 8U (355.6mm) of 19" (482.6 mm) racking space within a 600mm * 900 mm cabinet.
- o Adequate number of power sockets with 230 volts, 16 Ampere rated per cabinet including required network cabling.
- o PAC Cooling provided: A constant ambient temperature of 21°C and a relative humidity of 30 % to 70 % is maintained.
- State of the art BMS software, which controls and monitors the buildings mechanical, electrical equipment, fire suppression system and maintains appropriate environmental control.
- o Smart UPS systems provided that are redundant, to run uninterrupted in the event of power outages.
- Physical Security provided through biometric access cards, locked cabinets and CCTV cameras.
- 2.4 Interested Corporates seeking data centre co-location service shall submit their Expression of Interest in the prescribed format along with supporting documents in triplicate in sealed envelope superscribing "Data Centre Co-location" by courier or registered mail as follows:

(i) Original plus one copy (hard copies) to:

Project Manager – ERP
National Aluminium Company Limited
NALCO Bhawan
P/1, Nayapalli
Bhubaneswar – 751061

E-mail: smohanty@nalcoindia.co.in or Sadanan@nalcoindia.co.in

Cell: +919437019027or +919437063609

2.5 General Terms and Conditions

i. Date of Submission: Within 30 days of publication of the advertisement.

- ii. Submission of EOI doesn't entitle a bidder to automatically qualify for availing the service.
- iii. The existing Data Centre space shall be provided for Co-location service.
- iv. The interested parties may like to visit the data centre if they desire, after taking due permission from Project Manager.
- v. NALCO reserve the right to accept or reject any or all the applications without assigning any reason.
- vi. NALCO shall not be responsible for any expense incurred by the applicants in connection with the preparation and delivery of their applications or any other expenses incurred as regards the subject EOI.
- vii. Fax / E-mail applications shall not be accepted.
- viii. Form I, II, III may be used for providing the information as sought for.

Form - I

General Information

1.	Name of the Company / Firm:				
2.	Company Category: CPSU/State Undertaking/Private Sector Company/Cooperative/Others				
3.	Head office address				
4.	CEO / CMD Name :				
5.	Telephone:	Contact Person:			
6.	Fax:	E-mail Id:			
7.	Place of incorporation / registration:	Year of Incorporation / Registration			

Financial Capability

Name of the Applicant:		

Financial information in INR / US\$ equivalent		Actual : Previous years	ctual : Previous years	
	2012 – 2013	2011-2012	2010 - 20011	
1. Total Assets				
2. Current Assets				
3. Total Liabilities				
4. Current Liabilities				
5. Sales				
6. Profit before Taxes				
7. Profit after Taxes				

(Signature)

Format for submitting the requirement by interested Corporates

- 1. Name of the company:
- 2. Nature of Business:
- 3. The purpose for which Data Centre (DC) is required: Primary DC / Disaster Recovery
- 4. In case of Disaster Recovery, the location of primary site:
- 5. The location for Data Centre: NALCO Bhawan , Nayapalli / Other Place as developed by NALCO in Bhubaneswar.
- 6. What is required?:

√ Data Centre Floor Space:

√ Rack Space:

V Sitting Space (at new Data Centre may be provided for Co-location Tenants):

7. How much required:

√ Sq. feet (for Data Centre Floor space):

√ No of Units of Rack Space required:

(The standard allocation is 8U (355.6mm) of 19" (482.6 mm) racking space within a 600mm * 900 mm cabinet). Each unit is 44.45 mm. of 19" (482.6 mm) racking space.

√ Sitting Space(at new Data Centre may be provided for Co-location Tenants):

√ Power requirement of servers and storage. Please mention

- 8. Name of Telecom operator for providing connectivity from Data Centre to Customer premises:
- 9. Whether required for own use or for third party use?
- 10. Timeline in which the data centre services would be required: in months
- 11. Period for which co-location service required (1 Year / 2Year / 3Year / more than 3Years):
- 12. Any Other specification/Requirement: Please indicate