

Minutes of Pre Bid Meeting

ICB No. 21/TCSP/GOODS/P3/2015/TR/TC (Package –3)

Minutes of the Pre-bid meeting of International Competitive Bidding (ICB) held on 21.05.2015 at 3.00 P.M. in the Committee Room of Office of DC (MSME) for supply of 10 lots of Machines and Equipment for Aurangabad and Bhubaneshwar.

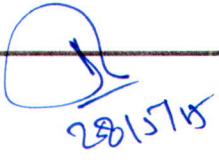
A pre-bid meeting was held today on 21.5.15 at 3.00 PM in the committee room, office of DC, MSME, Nirman Bhawan under the Chairmanship of Sh. R.K. Pandey, Joint Development Commissioner, O/o DCMSME, for the prospective bidders for the ICB to supply 10 lots of Machines and equipment for Aurangabad and Bhubaneshwar under World Bank assisted Technology Centre Systems Programme. List of participants is enclosed at Annexure-1.

At the outset, Shri Ramesh Kumar Pandey, Joint Development Commissioner warm welcomed all the designated representatives, present in the pre-bid meeting and gave a detailed background of TCSP.

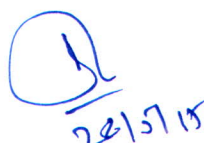
He informed to the participants that if there is any query and doubt, they can raise those queries and if possible, we shall try to reply those queries here itself otherwise, the reply will be given after due consideration and will be uploaded on our web-site.

The designated representatives of the participating organizations raised their queries during the pre-bid meeting. They were asked to give their queries in writing so that same can be considered and approved by the competent authority before uploading on the website of O/O DCMSME. They were also requested to visit website regularly to get timely updates.

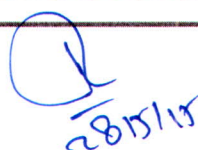
The compilations of the queries raised by participants and response to queries are as follows:

1 | 

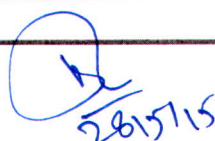
Sr. No	Query	Response of the Client
1.	<p>Lot No.1 &6 PROVEOUTOFSAMPLEPART-Qualification material</p> <p>Its not clear from the ICB the exact requirement for sample prove out i.e. Chemical Analysis / Metallographic Analysis/ Material Testing/MIL Certification of End use part etc.</p> <p>Its also not clear whether you require any Quality Assurance check during the Production process so that End part produced meet the specified certifications for example How the build process will ensure that the layer thickness is exactly the same as defined in the parameter and if there is any feedback loop during the Production process to guarantee the layer build process.</p> <p>Another example is to ensure that the laminar flow is maintained all the time during the build process which is very critical for some of the materials like Inconel/HX to maintain the desired quality levels.</p>	Refer Sr. No. 7 of Addendum/Corrigendum No. 1
2.	<p>Lot No.1 &6</p> <p>Sr.No 3, Point No 9 (c)</p> <p>Also kindly confirm if the material should have Mill certificate of the powder as well as sintered part.</p>	It refers to the Powder
3.	<p>Lot No.1 &6</p> <p>Sr.No3, Point No 3</p> <p>Kindly confirm if the powder bed monitoring is similar to laser powder monitoring at the powder chamber.</p>	Yes
4.	<p>Lot No.1 &6</p> <p>The prove out will be based on the data sheets provided by the OEMS.</p>	Yes
5.	<p>Lot No.1 &6</p> <p>Fatigue life & creep/stress rupture life gives, point No 9 can be subjective. How to certify since it is based on geometries.</p>	No amendment is considered necessary.
6.	<p>Lot No.1 &6</p> <p>Point no 12 (Scanner)</p> <p>Does this mean that the scanner size should be the same as X,Y size of the effective buid envelope.</p>	Yes
7.	<p>Lot No.1 &6</p> <p>Point No 14, Handling system – this point is not clear since this is more relavant for plastic (Polymer additive manufacturing machine)</p> <p>b) how to certify this ?</p>	No amendment is considered necessary.The information in the bid document is sufficient.
8.	<p>Lot No.1 &6</p> <p>Pointo 15, how this 15000 hrs will be calculated.</p>	200 No of Filters may be provided. Refer Sr. No. 1 of Addendum/Corrigendum No. 1
9.	<p>Lot No.1 &6</p> <p>support materials</p>	Yes. Refer Sr. No. 6 of



Sr. No	Query	Response of the Client
	<p>a) Hot Die Steel 11 b) Aluminium Alloy BSL 168 c) Stainless Steel SS 304 All these in powder form certified for AM System. In this case equivalent certified materials can be considered (or) not.</p> <ul style="list-style-type: none"> - For Hot Die Steel 11-steel equivalent for die casting tooling. - For Aluminium Alloy BSL 168- Alsi10Mg alloy can this be considered. - For SS304- SS 316 (or) stainless steel 17.4 or 15.5 could be considered. 	Addendum/Corrigendum No. 1
10.	<p>Lot No.1 &6</p> <p>Point No 19 (b) – Part Removal system from Platform Is this Bandsaw or WireEDM</p>	Deleted. Refer Sr. No. 2 of Addendum/Corrigendum No. 1
11.	<p>Lot No.1 &6</p> <p>Essential Accessories-</p> <p>a) Cleaning kits for optics and other sub systems – is this the lens cleaning paper (or) something else.</p>	No amendment is considered necessary
12.	<p>Lot No.1 &6</p> <p>Point No C- Clamping system – is this</p> <p>EROWA (or) is this position reference platform with dowel pins.</p>	Erowa or System 3R. Refer Sr. No. 4 of Addendum/Corrigendum No. 1
13.	<p>Lot No.1 &6</p> <p>Proveout of sample parts / qualification materials – kindly provide us the drawing in STL format if you agree STL format.</p> <p>Will some one go for pre dispatch inspection from MSME or should we send only reports if no one is going.</p> <p>For site condition, the vendor can supply the site conditions minus civil and electrical work.</p>	Refer Sr. No. 7 of Addendum/Corrigendum No. 1
14.	<p>Lot No.1&6: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.2</p> <p>Prospective Bidder provides inert gas atmosphere with argon gas which is suitable for processing reactive & non reactive materials. Since the processing of reactive materials under atmospheres containing nitrogen (for instance from nitrogen generators) causes nitrides and exothermic reaction, Prospective Bidder does not recommend use of nitrogen. The chamber constructed is of high integrity sealing system and based on vacuum chamber design with ultra-low argon gas consumption (typically under 30 Litre per hour in normal running), this helps in lowering running cost of the machine.</p>	No amendment is considered necessary.



Sr. No	Query	Response of the Client
15.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.3 Online monitoring system of build process features are specific to particular manufacturer, if you wish other manufacturers to participate it needs to be generalised.	No amendment is considered necessary.
16.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.12 Scanner: Actively cooled deflection mirror. Again this is specific to the particular manufacturer this needs to be generalised.	No amendment is considered necessary.
17.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.13(a) Focussing lens a) F-Theta lens that focuses the beam on a flat plane and a window with provision of dirt cleaning. Again this is specific to the particular manufacturer this needs to be generalised.	No amendment is considered necessary.
18.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.15(b) SUPPORT FEATURES b) Filters for serving 15000 hrs to be supplied along with the system (Coater blades - 6 Nos. for each material to be supplied along with the machine. Filter includes for 1500 hrs (number of filters will depend on the number of builds - one filter per build). Assuming builds are 100 hours average, then we can include in our offer 150 filters. Recoated blades included in our offer)	No amendment is considered necessary.
19.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS a) Minimum Layer Thickness / Maximum Layer Thickness 20 microns or less / 60 microns or more(yes)	No amendment is considered necessary
20.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS b) Editable Free parameter range 10 to 200 microns or better (yes)	No amendment is considered necessary
21.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS c) Layer thickness under Argon 30-40 micron or better(always under argon; range 20 - 60 micron)	No amendment is considered necessary
22.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS d) Build Volume Rate 7 to 32 cm ³ /h or better(5-20 cm ³ /h, it depends on material and layer thickness)	No amendment is considered necessary
23.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS e) Accuracy- as per ISO 2768-11 DfN or equivalent	No amendment is considered necessary



Sr. No	Query	Response of the Client
	standard Over a length of 100 mm 70 microns or better Over a length of 250 mm 100 microns or better (we don't measure accuracy as per any standard. We have measured ± 50 micron, geometry dependant)	
24.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS f) Capability to build parts Minimum wall thickness -not more than 0.8 mm Minimum diameter-not more than 0.8 mm(yes)	No amendment is considered necessary
25.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.2 BUILD PARAMETERS g) Exposure Editor Speed 7 m/s or better(not relevant. We have exposure time and point distance. Laser fires intermittently and not constantly. Scan speed depends on material)	No amendment is considered necessary
26.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No. 5 ESSENTIAL ACCESSORIES The amount of powder needed to build 1000 hrs will very much depends on the geometry of the part hence this needs to be reviewed.	Refer Sr. No. 5 of Addendum/Corrigendum No. 1
27.	Lot No.1 & 6 : 3-D Additive Manufacturing Machine Tech Spec-Serial No. 3 Whenever a machine is provided under technology improvement program it is always preferred that the system should be upgradable i.e should have upgrade options.	Refer Sr. No. 3 of Addendum/Corrigendum No. 1
28.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.5 Nitrogen generator should be provided by the manufacturer.(Not Supplied)	No amendment is considered necessary.
29.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.11 OPTICS SYSTEM a) The system capable of directing laser beam to melt with the aid of optic, beam expander, scanner mirror / focusing lens etc. Optical surfaces to have special coatings for beam steering.	No amendment is considered necessary
30.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.11 OPTICS SYSTEM b) For cooling the laser a water gas cooling system should be provided along with the system. b) Yes, except for neither of the 2 scanheads has actively cooled mirrors	No amendment is considered necessary
31.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.11 OPTICS SYSTEM	No amendment is considered necessary

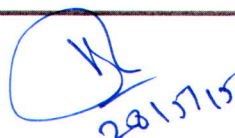
Sr. No	Query	Response of the Client
	c) The energy source should be min 400 W fibre laser. c) yes, this function is available in the 400 W machine)	
32.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No. 5 ESSENTIAL ACCESSORIES Supplier should provide additional equipment for the post-treatment of the parts. (Pls. specify what kind of post-treatments are required? Additional equipment can then be asked for/offered accordingly. A general statement like this is confusing for both the Purchaser & the Supplier.)	Refer Sr. No. 2 of Addendum/Corrigendum No. 1
33.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.3.13(b) Focussing lens b) Focus diameter in the range 50-150µm. (b) For 400 W, focus diameter is fixed at 135 micron. For 200 W, focus diameter is fixed at 70 micron)	No amendment is considered necessary.
34.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.15(a) SUPPORT FEATURES a) Automatic support generation for overhang features and removal of support impressions through post processing procedures such as air blast to be provided. (yes)	No amendment is considered necessary.
35.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.18 SUPPORT MATERIAL The supplier shall also supply 100 kgs of each commercially available powder of the following materials. a) Hot Die Steel 11(no, maraging steel 1.2709) b) Aluminium alloy BSL 168(AlSi10Mg) c) Stainless steel SS 304(SS 316L) d) Ti alloy Ti-6Al-4v(yes) e) Nicklealloy I 718(yes)	Refer Sr. No. 6 of Addendum/Corrigendum No. 1
36.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.4.4 POWER SUPPLY Machine should operate at 400V + 6% 1-10% / with line frequency of 50/60Hz and main fuse protection. Step up/down transformer should be included in case of variations. An UPS with appropriate specifications to be provided . (Std Power supply 230 V 16 A 1 ph (other power configurations on request))	No amendment is considered necessary.
37.	Lot No.1 : 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 There is a Point No 5 mentioned on Page 81 regarding mentioning of local source in india for local production and procurement which is not available at this point but our machine is open system so that user can process as per his requirement and procure from anywhere.	No amendment is considered necessary.

Sr. No	Query	Response of the Client
38.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 Scanner provided in the machine should be able to scan the complete build volume, on the same page there is a point c which requires integrated home in sensor. Above 2 requirements seems to be specific to 1 vendor.	No amendment is considered necessary.
39.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 Support material mentioned are specific to vendor and we have different alloy grade available for aluminium and stainless steel.	Refer Sr. No. 6 of Addendum/Corrigendum No. 1
40.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 Point No 4.2 Accuracy requirement is as per ISO 2768-1/DIN and over a length of 100 mm , 70 microns or better but as per the machine parameters accuracy depends on the shape / dimension ratio which could vary with design and material.	No amendment is considered necessary.
41.	Lot No.1 : 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 there is a requirement of essential like annealing furnace , inert gas generator which could varies with vendor or may not required with in other machine so bidder should suggest or mention the optional accessories.	No amendment is considered necessary.
42.	Lot No.1: 3-D Additive Manufacturing Machine-Metal Tech Spec-Serial No.1 There are many equipments and accessories which could be purchased from india and some con not be quoted in USD to avoid customs so we request you to consider our partial proposal in INR.	No amendment is considered necessary.
43.	LOT No. 1 – 3-D Additive Manufacturing Machine- Metal AUR/P/001 Section 3- Technical Specification: page 83, Point 9e VII and VIII: These properties are linked to material and depends on geometry,post treatment, hence difficult to provide general data.	No amendment is considered necessary
44.	Lot No.2: 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.3 Page 92 Parts should be manufactured with a maximum of 20% material waste. How can we certify this.This can vary from design to design and part to part.Kindly clarify.	No amendment is considered necessary
45.	Lot No.2: 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.3 Page 93, Point no 5 Essential Accessories. Since we need compressor, Air Conditioner , do we need to quote for this also.	No need. See Point No 11 in the technical specifications.
46.	Lot No.2: 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.3	Specifications are self explanatory

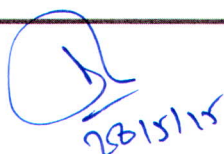
Sr. No	Query	Response of the Client												
	Page No 95, Point no 11 Kindly confirm that the vendor do not have to do civil and electrical work.													
47.	Lot No.2: 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.3 Page No 95, Point no 12-Training Optimal cooling design & design support does not apply for polymer system .kindly clarify your stand.	Refer Sr. No. 11 of Addendum/Corrigendum No. 1												
48.	Lot No.2: 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.3 Page No 95, Point no 10 Usage of 3 rd Party materials – how will you need us to confirm this.	No amendment is considered necessary.												
49.	Lot No.2 : 3-D Polymer Additive Manufacturing Machine Tech Spec-Serial No.1 The specificagtions of the machine is oriented towards one technology i.e selective laser sintering and the material asked with the machine areproprietary. Request uou to consider other Rp technologies.	No amendment is considered necessary.												
50.	Lot no.2 : 3-D Polymer Additive Manufacturing Machine AUR/P/002 Indo German tool Room Aurangabad will be service provider for surrounding industries which are mainly into automotive part manufactures and does not require parts prototyped from material requested in tender.	No amendment is considered necessary												
51.	Lot no.2 : 3-D Polymer Additive Manufacturing Machine AUR/P/002 Material of the machines asked are proprietary & can be supplied only by one manufacturer.	No amendment is considered necessary												
52.	Lot No.3 : 3-D Scanner Tech Spec-Serial No.4.1 Field of View <table border="1"><tr><th>Field of View</th><th></th></tr><tr><td>45 Field of View</td><td>45 x 38 x 30</td></tr><tr><td>75 Field of View -</td><td>74 x 62 x 45</td></tr><tr><td>250 Field of View -</td><td>260 x 215 x 140</td></tr><tr><td>500 Field of View -</td><td>750 x 630 x 500</td></tr><tr><td>Accuracy of measurement</td><td>10 µm or better</td></tr></table> The above are manufacturer specific specifications pertaining to one specific manufacturer. Our suggestion is to specify the pitch (point to point distance) rather than specific fild of view. Specifications specifying accuracies specifically as a) Probing accuracy form b) Probing accuracy size c) Sphere spacing error	Field of View		45 Field of View	45 x 38 x 30	75 Field of View -	74 x 62 x 45	250 Field of View -	260 x 215 x 140	500 Field of View -	750 x 630 x 500	Accuracy of measurement	10 µm or better	No amendment is considered necessary.
Field of View														
45 Field of View	45 x 38 x 30													
75 Field of View -	74 x 62 x 45													
250 Field of View -	260 x 215 x 140													
500 Field of View -	750 x 630 x 500													
Accuracy of measurement	10 µm or better													



Sr. No	Query	Response of the Client										
	<p>d) Length measuring error.</p> <p>All have different valus for different field of view. A chart is required to correctly specify all accuracies.</p>											
53.	<p>Lot No.3 : 3-D Scanner Tech Spec-Serial No.4.1</p> <p>Calibration system benchmark VDI/DGQ 2634 part 2 is applicable to system measuring by single part. For multiple shot measuring system as per your specifications the relavant standard is VDI/DGQ 2634 Part 3.</p>	Refer Sr. No. 13 of Addendum/Corrigendum No. 1										
54.	<p>Lot No.3 : 3-D Scanner Tech Spec-Serial No.4.1 Field of View</p> <table><tr><th>Field of View</th><th></th></tr><tr><td>45 Field of View</td><td>45 x 38 x 30</td></tr><tr><td>75 Field of View -</td><td>74 x 62 x 45</td></tr><tr><td>250 Field of View -</td><td>260 x 215 x 140</td></tr><tr><td>500 Field of View -</td><td>750 x 630 x 500</td></tr></table> <p>The valus of 750 , 630 and 500 looks wrng by industry standards it should be around 480x 400 x 250 mm.</p>	Field of View		45 Field of View	45 x 38 x 30	75 Field of View -	74 x 62 x 45	250 Field of View -	260 x 215 x 140	500 Field of View -	750 x 630 x 500	Refer Sr. No. 12 of Addendum/Corrigendum No. 1
Field of View												
45 Field of View	45 x 38 x 30											
75 Field of View -	74 x 62 x 45											
250 Field of View -	260 x 215 x 140											
500 Field of View -	750 x 630 x 500											
55.	<p>Lot No. 4 CNC wire cut Technical Specification: Serial No. 4.1 U & V Axis Traverse , it is impractical & we feel that it should be less. Specifications are not correct.</p>	No amendment is considered necessary.										
56.	<p>Lot No. 4 CNC wire cut Technical Specification: Serial No. 4.5 Positional Tolerance</p> <p>+/-0.002mm or more per 800mm</p>	Refer Sr. No. 14 of Addendum/Corrigendum No. 1										
57.	<p>Lot No. 4: CNC wire cut ElectricDischarge Machine Submerged type Page 104, SI.3</p> <p>Features: Fixed table, Moving column machine</p> <p>Please change to moving table, field column machine. Tender spec. is smaller version machine and will come with moving table and fixed column, kindly request to amend as per our request for all manufacturers to participate</p>	Refer Sr. No. 15 of Addendum/Corrigendum No. 1										
58.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 104, SI.3</p> <p>Feature: Tool confirms to IS: 14137 STD</p> <p>For imported machine std. will be as international standard, JIS, ISO, DIN. Please change to IS std. (or)</p>	No amendment is considered necessary.										

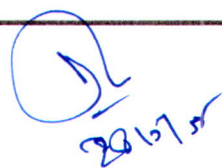


Sr. No	Query	Response of the Client
	equivalent international standard	
59.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 104, SI.3</p> <p>Feature: Wire Chopper</p> <p>Remove wire chopper. Used brass wire is having resale value but chopped wire is not having resale value and that wire cannot reuse again that's why all OEM's are providing wire chopper along with machine for benefitting customer</p>	No amendment is considered necessary.
60.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 104, SI.3</p> <p>Feature: Wire feed</p> <p>Wire spool capacity Min. 20 Kg to 30 Kg accordingly to DIN Std. K100, K125, K160 as well JIS P3 & P5</p> <p>Wire spool, as per DIN std. K-125 is 3.5 Kg K-160 is 5 Kg P3 – 3.5 Kg P5 – 5 Kg</p> <p>Please amend the min. wire spool cap. 3.5 to 5 Kg</p>	No amendment is considered necessary.
61.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 105</p> <p>Feature: Dielectric System</p> <p>Mineral bed filtration system along with paper filtration (inside out 10 micron paper filter)</p> <p>Please amend paper filtration system of 5 micron paper filter. Mineral bed filtration is failure model.</p>	No amendment is considered necessary.
62.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 107</p> <p>Feature: Technical data</p> <p>U-axis: 800 mm Minimum Z-axis: 550 mm Minimum</p> <p>Please amend the spec. to U axis: 160 mm Minimum Z axis: 160 mm Minimum</p> <p>Please note Axu. Axis will not travel as equal as X & Y axis.</p>	No amendment is considered necessary.
63.	<p>Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 107</p> <p>Feature: Taper angel per 400mm +/-45 deg</p>	No amendment is considered necessary.

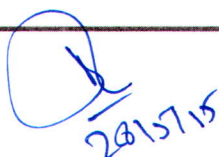


Sr. No	Query	Response of the Client
	Please change the taper angle +/-30 deg/100 mm. Normally all manufacturers are providing taper angle of +/-30 deg/100 mm only.	
64.	Lot No. 4: CNC wire cut Electric Discharge Machine Submerged tye AUR/P/004 Page 108 Feature: 40 GB HDD for data storage Please clarify if this hard disk is used as secondary memory.	No amendment is considered necessary.
65.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 UNDER FEATURES: - Point of HYDROSTATIC QUILL guidance system. Normally this kind of quill is not hydrostatic and moreover hydrostatic guidance is not required. Hydrostatic quill comes only with heavy load requirements. Normally it is hand lapped precision / mechanical bearing with minimum run-out. Therefore please delete the hydrostatic guidance system.	No amendment is considered necessary
66.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 LINEAR MOTOR FOR Z-AXIS. This is a big disadvantage on a machine like Jig Grinding. Normally Linear Motors are used in case of high feed / rapid rate and therefore does not fit in the specification of Jig Grinder. The Z-axis is driven by high precision ball screw. Hence kindly amend the linear Motor with Ball screw.	No amendment is considered necessary
67.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 UNDER TECHNICAL DATA: Clause No. 4.1. On one hand you ask for machine with size X-Y traverse 700 x 500 mm whereas separately for Y-axis travel you ask for 600 mm against 500 mm. Also please note the Vertical adjustment of grinding head – W-axis is 50% or less than Y-axis for stability requirement. You have asked W-axis of 500 mm which is almost 80% of the Y-axis. Therefore please replace W-axis travel of 500 mm with 300 mm same in case of quill travel replace 160 mm with 120 mm.	Refer Sr. No. 17 of Addendum/Corrigendum No. 1
68.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 Maximum Grinding dia. in planetary mode, do not understand why it is 140 and why not 125 mm or 150 mm? The figure of 140 seems to be very specific hence it to 120 mm.	Refer Sr. No. 18 of Addendum/Corrigendum No. 1
69.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 Feed rate of U-axis is 0.25 mm/min is too high on a Jig	No amendment is considered necessary

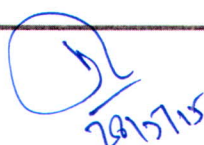
Sr. No	Query	Response of the Client
	Grinding and it should be 50% less i.e. 0.12 mm/min.	
70.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 Other minor deviations are normally acceptable on +/- 10% basis.	No amendment is considered necessary
71.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 Technical Specification Serial No. 3 features Also machine should have capacity of hard milling	No amendment is considered necessary
72.	LOT NO. 5 : CNC JIG GRINDING MACHINE : AUR/P/005 UNDER TECHNICAL DATA: Clause No. 4.1. Technical Specification Serial No. 4.1 Technical Data Maximum Grinding Diameter in Planetary mode with grinding motor in U axis in centre position in automatic grinding mode	No amendment is considered necessary
73.	Lot No.8 CNC Multi Axis Micro Machining Centre We request you to kindly provide us the following accuracy as per VDI/DGQ 3441: a) Positioning accuracy for X,Y and Z axis b) Repeatability accuracy for X,Y and Z Axis c) Spindle run out accuracy	Refer Sr. No. 19 of Addendum/Corrigendum No. 1
74.	Lot No.8 CNC Multi Axis Micro Machining Centre Tech specs: Sr.No 3 Basic Machine / Features Page No 139 5 th bullet all the three (X,Y,Z) axes should be on the spindle , A,B,C should be on the table. This does not fit in the existing nomenclature of machine and should read as " machine should be equipped with three linear axes in X,Y,Z with rotary axes (A,C) and swivelling spindle.(B axes)	Refer Sr. No. 20 of Addendum/Corrigendum No. 1
75.	Lot No.8 CNC Multi Axis Micro Machining Centre While going through your tender specification, we find some of the features deviate from our machine specification, like Z Stroke-300 mm in place of 400mm. CNC Control BOSCH –REXROTH INDRAMAT We wish to request you to revise the tender specifications as per the above so that we may comply with all of your tender specification and participate against this requirement.	No amendment is considered necessary.
76.	Lot No. 9 CNC wire cut Technical Specification: Serial No. 4.2 Positional Tolerance Positional Repeatability: +/-0.002mm or better	Refer Sr. No. 21, 22 & 23 of Addendum/Corrigendum No. 1



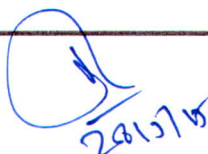
Sr. No	Query	Response of the Client
	Positional Accuracy: +/-0.002mm or better	
77.	<p>Lot No. 9: High precision CNC Wire cut electric Discharge machine submerged type BBS/P/004 Page: 145, SI 3</p> <p>Feature: SS Table suitable for mounting various type of job and four side table</p> <p>Please amend as SS Table suitable for mounting various types of job & Three side (or) C type table. Please note machine column side all the wire guiding unit and pressure flushing unit will come.</p>	No amendment is considered necessary.
78.	<p>Lot No. 9: High precision CNC Wire cut electric Discharge machine submerged type BBS/P/004 Page: 146</p> <p>Feature: Dielectric cooling unit integrated and minimum 8 Nos. filter used</p> <p>Please change min. 2 nos. of filter used.</p>	No amendment is considered necessary.
79.	<p>Lot No. 9: High precision CNC Wire cut electric Discharge machine submerged type BBS/P/004 Page: 147</p> <p>Feature: CNC Control unit feature max. programmable input for X, Y, U, V +/- 99999.999MM</p> <p>Please request to change as max programmable input for X, Y, U, V +/- 9999.9999MM</p>	No amendment is considered necessary.
80.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 3: Machine Tool Fixed table, moving column machine.</p> <p>Please amend to Moving table, Fixed column machine.</p>	Refer Sr. No. 24 of Addendum/Corrigendum No. 1
81.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 3: Machine Tool S.S. table suitable mounting various types of job</p> <p>Not Complying. Hardened at 54 HRC and coated with chromium Universal clamping frame for best utilization of the work zone</p>	No amendment is considered necessary.
82.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC</p>	No amendment is considered necessary



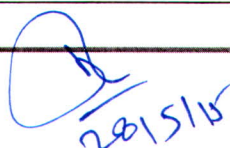
Sr. No	Query	Response of the Client
	Wirecut Electric Discharge Machine Submerged Type S.I. No 3: Machine Tool Machine Tool confirms to IS : 14137 standards Not Clear. Please explain in detail.	
83.	Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type S.I. No 3: Machine Tool Integrated collision protection for X, Y, U, V& Z Axis. Not Applicable on this machine model.	No amendment is considered necessary
84.	Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type S.I. No 3: Wire feed Wire Spool capacity Min. 6 kg. to 25 kg. according to DIN . DINStd K100, K125, K160 as well as JIS p3 & P5. Not clear. Please explain in detail.	No amendment is considered necessary
85.	Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type S.I. No 3: Wire feed Additional wire threading functions like Hole search Not applicable on this machine model	No amendment is considered necessary
86.	Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type S.I. No 3: Axis Positional tolerance for full stroke in each axis (max) +/- 0.002 mm per Positional repeatability +/- 0.001 mm Positional accuracies +/- 0.001 mm Tolerance with in 4 microns should be acceptable.	Refer Sr. No. 21, 22 & 23 of Addendum/Corrigendum No. 1
87.	Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC	No amendment is considered necessary



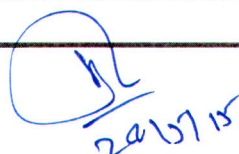
Sr. No	Query	Response of the Client
	<p>Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 3: CNC - Control Unit Features Max. programmable input for X, Y, U, V +/- 99999.999 mm Not clear. Please explain in detail.</p>	
88.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 4.2: Machine Tool Measurement Resolution for all axis: 0.0005 mm or Better</p> <p>Linear Glass scales for all axes with direct measuring system for resolution is 0.5 microns . Measuring resolution depends on the work piece surface.</p>	No amendment is considered necessary
89.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 4.2: Machine Tool Positional tolerance for full stroke in each axis: +/- 0.002 mm or more per 300 mm</p> <p>Positional tolerance for full stroke in each axis should be +/-0.004 mm.</p>	Refer Sr. No. 21 of Addendum/Corrigendum No. 1
90.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 4.2: Machine Tool As per VDI/DGQ Standard Positional Repeatability: +/- 0.001 mm or better</p> <p>Tolerance for full stroke in each axis should be +/- 0.004 mm.</p>	No amendment is considered necessary
91.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 4.2: Machine Tool As per VDI/DGQ Standard Positional accuracy: +/- 0.001 mm or better</p>	No amendment is considered necessary



Sr. No	Query	Response of the Client
	Tolerance for full stroke in each axis should be +/- 0.004 mm.	
92.	<p>Lot no. 9 of ICB No. 21/TCSP/GOODS/P3/2015/TR/TC Package 3, High Precision CNC Wirecut Electric Discharge Machine Submerged Type</p> <p>S.I. No 5: Standard Accesories Float Adjuster</p> <p>Not clear. Please expain in detail.</p>	No amendment is considered necessary
93.	<p>Lot No 10: CNC 5 Axis Machining Centre Technical Specs Features</p> <p>Page no 153: feature –Tool holding suitable for tool shank HSK A63/ ISO 40 with through air supply.Through spindle coolant supply is standard next to this line you mention.</p> <p>Spindle tol adapting suitable for automatic tool change as per HSK E-50. It should be HSK A-63/ISO-40/BT-40.</p>	Refer Sr. No. 25 of Addendum/Corrigendum No. 1
94.	<p>Lot No 10: CNC 5 Axis Machining Centre Technical Specs Features</p> <p>Page No 156, Point no 4.1 Resolution X-Y-Z , 0.0001 minimum or better .it should be 0.001 minimum or better.</p> <p>Point No 4.2 Main Spindle specifications. Resolution 0.0001 or better.Such point is not required in main spindle specifications.</p> <p>Page No 157 Point 4.6 Accuracy as per VDI DGQ 3441 standard .It should be ISO 230 or equivalent.</p>	Refer Sr. No. 31 and 32 of Addendum/Corrigendum No. 1
95.	<p>Lot No 10: CNC 5 Axis Machining Centre Technical Specs Features</p> <p>Page No 158, Point No 5 Standard accessories 2 Nos of all adapters for both standard turning & milling operations.</p> <p>If it is 5 axis machining centre turning adapters are not required.</p>	Refer Sr. No. 33 of Addendum/Corrigendum No. 1
96.	<p>Lot No. 10 CNC 5 Axis Machining Centre Technical Specification:</p> <p>Sr.o 2 : Application –Machine has been asked to perform turning operations</p> <p>Features- Tool holding/ cutting tools must be abe to use standard milling and turning tool holders .</p> <p>Essential Features- Milling tool spindle mechanical locking system for turning.</p>	Refer Sr. No. 26, 28 & 29 of Addendum/Corrigendum No. 1

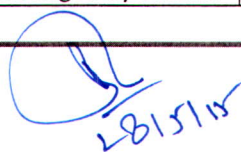


Sr. No	Query	Response of the Client
	Query: Please clarify if machine is required to do turning application and has to be supplied with a turning table , torque , table diameter etc.	
97.	<p>Lot No. 10 CNC 5 Axis Machining Centre Technical Specification:</p> <p>Sr.No 2: basic machine and construction ; Tender specifies machine with gantry type mineral casting /polymer concrete.</p> <p>Query: We would like to incorporate the single piece casting monoblock design with GGG60. This design offers maximum milling performance and excellent accuracy and with its extreme rigidity and stability.</p>	Refer Sr. No. 27 of Addendum/Corrigendum No. 1
98.	<p>Lot No. 10 CNC 5 Axis Machining Centre Technical Specification:</p> <p>Sr.No 2: CNC System Asked for RS232</p> <p>Query: We offer machines that uses latest method of data transfer by Ethernet , CF Card d USB. We would request to kindly delete RS 232 (as the same is getting obsolete) and not preferred these days.</p>	Refer Sr. No. 30 of Addendum/Corrigendum No. 1
99.	<p>Lot No. 10: CNC 5 Axis Machining Centre BBS/T/005 Page 153</p> <p>Features: Tool holding / cutting tools must be able to use</p> <p>Please amend as below: Spindle tool adapting suitable for automatic tool change as per <u>HSK-A63 / ISO40 / BT40</u></p>	Refer Sr. No. 25 of Addendum/Corrigendum No. 1
100.	<p>Lot No. 10: CNC 5 Axis Machining Centre BBS/T/005 Page 156 - Clause 4.1</p> <p>Feature: Resolution X-Y-Z</p> <p>Please amend as below: <u>0.001</u> minimum or better</p>	Refer Sr. No. 31 of Addendum/Corrigendum No. 1
101.	<p>Lot No. 10: CNC 5 Axis Machining Centre BBS/T/005 Page 156 – Clause 4.2</p> <p>Feature: Main Spindle Specification Resolution</p> <p>Please note such point is not required in Main Spindle Specification. Hence we suggest removing the same.</p>	Refer Sr. No. 32 of Addendum/Corrigendum No. 1
102.	<p>Lot No. 10: CNC 5 Axis Machining Centre BBS/T/005 Page 157 – Clause 4.6</p> <p>Feature: Accuracy</p> <p>Please amend as below:</p>	No amendment is considered necessary



24/5/15

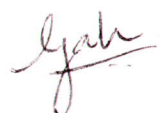
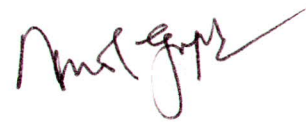

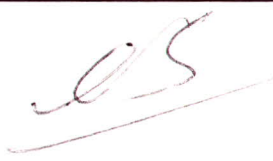

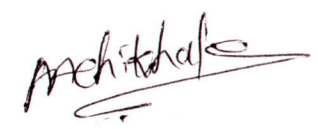
Sr. No	Query	Response of the Client
	Accuracy as per VDI DGQ3441 or ISO 230 or Equivalent Standard	
103.	<p>Lot No. 10: CNC 5 Axis Machining Centre BBS/T/005 Page 158 – Clause 5</p> <p>Feature: Standard Accessories</p> <p>Please amend as below: If it is 5-Axis Machining Centre then turning adaptors are not required. Hence please amend as below: 2 No's of all adaptors for standard milling operations</p>	Refer Sr. No. 33 of Addendum/Corrigendum No. 1
104.	<p>Q1 Will due date be extended?</p> <p>Q2 We request an extension of the due date for atleast a month as necessary banking formalities should be completed.</p> <p>Q2 We request you to extend the due date for BID submission till 15.07.2015, which enable us for arranging the Bank Guarantee/EMD and other technical details, so that we can submit our well compliant and competitive offer/bid.</p>	Refer Sr. No. 34, 3536 and 37 of Addendum/Corrigendum No. 1
105.	Will scope of supply change after bid is submitted?	The scope of supply is clearly stipulated in Section VII "Schedule of Requirement"
106.	Will there be a price negotiations due to change in technical or commercial scope of supply	Refer ITB clauses 38 and 42
107.	<p>We are subsidiary of Foreign Manufacturer and dealing through FTWZ (Free trade warehousing zone) process as below:</p> <ul style="list-style-type: none"> Machine made in Foreign Country. Currency will be in INR Payment through Inland LC At FTWZ custom clearance we will be needing the exemption certificate. This process also attracts 2% CST against form 'C' from purchaser <p>Kindly clarify according to your price schedule under what price schedule it comes we feel it comes under: "3. Price schedule: Goods manufactured outside the purchaser's country, to be imported(given in Page No.-53) Kindly confirm</p>	<p>Refer ITB clause 12, 14, 34.5 and SCC clause GCC 16.1 as well as Bid Data Sheet (BDS) clause 14</p> <p>Relevant Bid Form 4 to be used</p> <p>Refer Sr. No. 38 and 39 of Addendum/Corrigendum No. 1</p>
108.	<p>Q. 1 Who will bear " Demarrage Charges" in case of delay from custom's authorities. Project Authority certificate i.e Customs Duty Exemption Certificate is requested to be provided two weeks prior to dispatch. Will be intimated by the supplier.</p> <p>Q.2 Custom clearance has to be arranged by Bidder.</p>	The purchaser will make all efforts to issue Project Authority Certificate/other certificate(s) within reasonable time on receipt of request and shipping documents from supplier.




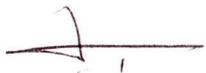

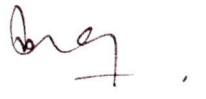

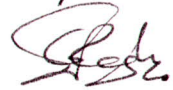
Sr. No	Query	Response of the Client
	GCC is not clear on demurrage payment due to practical differences/delays. Who will be responsible for payment of demurrages?	No amendment is considered necessary Also, refer ITB and BDS clause 14.8
109.	<p>Q1 For local purchase of accessories, necessary statutory documents should be provided such as road permit etc. Can this portion of the contract (in INR) be placed on the local subsidiary separately as an order?</p> <p>Q2. There are many equipment and accessories which could be purchase from India and same cannot be quote in USD to avoid customs so we request you to consider our partial proposal in INR.</p> <p>Q3. With respect to the commercial offer, the local supplies can be supplied in INR (from Indian subsidiary) while the main systems are to be supplied from Foreign Manufacturer.</p>	Refer to ITB 12 and ITB 15 and BDS Clause 15.1
110.	Is withholding taxes applicable on foreign firm's and will a TDS certificate be issued.	Refer GCC clause 17 in this regard.
111.	We request you to accept LD charges to be limited to a maximum of 5% of contract value.	No amendment is considered necessary
112.	<p><u>Warranty :</u></p> <p>Foreign Manufacturer agrees to accept only one year extended warranty beyond one year normal warranty. However, They are ready to take AMC after completion of Warranty period.</p>	Refer SCC clause GCC 28.3.
113.	<p><u>Delivery :</u></p> <p>Foreign Manufacturer agrees to supply this machine within 24 weeks FOB only.</p>	Refer Sr. No. 43 of Addendum/Corrigendum No. 1
114.	<p><u>Inland Freight and Insurance :</u></p> <p>Foreign Manufacturer will take responsibility of theconsignment up to nearest Indian seaport only. Inland freight and Insurance up to Bhubaneswar have to be arranged by purchaser.</p>	No amendment is considered necessary


29/5/15




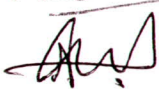
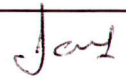


Attendance of Pre Bid Meeting of ~~MCB~~ for supply of 10 lots of Machines and Equipments for IGTR Aurangabad and CTTC, Bhubneshwar, held on 21.05.2015, 3.00 PM

S.No.	Name of the Organization	Name of the Representative & Designation	E-mail Address, Mobile No	Fax, Signatures
1	WILLEMEN MACODEL (INDIA (P) LTD.	GANESH LAKSHMANAN DIRECTOR/COUNTRY HEAD	ganesh.lakshmanan @willemen-macodel.com (+91) 7702908999	
2	APM Technologies	ANIL GUPTA - CEO ADITYA GOEL	anilgupta@apmtechindia.com 98101-19096	
3	G.F. Banga	S.P. THAKUR S Mohan	spt@moetod.ca 98208 74280	
4	NICKKINT EXIM INDIA P (P) LTD	NICKKINT SHAH CMD & ROBINARANATH SCM	nickkintshah@ nickkintgroup. com 9821014411	
5	L. Kellenburger M/S Chrysler MIC TOOLS P Ltd Pune	M RISHAICH Chrysler mic tools P Ltd Pune	mrishai@chrysler.com 9892249582	
6	HAAS Factory Outlet CNC Servicing & Sales (P) Ltd	Ashish A. Chikhale DGTA Federal Sales	achikhale@phillipscorp.com 9322026604	

Attendance of Pre Bid Meeting of NCB for supply of 10 lots of Machines and Equipments for IGTR Aurangabad and CTTC, Bhubneshwar, held on 21.05.2015, 3.00 PM

S.No.	Name of the Organization	Name of the Representative & Designation	E-mail Address, Mobile No	Fax, Signatures
7	EOS GmbH India Office 36, Simanta Nagar K.B. Hill, Chennai-78. 7	Prakasam Anand Country Manager.	pranand@eos-ufc 9840033223	
8	DesignTech Systems 102 Dahur 8	Veejay Kapse	Veejay.Kapse@ designtechsys.com	
9	Renishaw Manology Systems Ltd. 9	Sanjay Sangam	sanjay.sangam @ renishaw.com 9845015275	
10	DesignTech Systems Ltd 10	Yashwant Landge GM	yashwant.landge@ designtechsys.com 9370147564	
11	3D Engineering Information LLP 11	RAHUL Sanap	rahul@3dengr.com 98230-21998	
12	DMG Mori Seiki India Machines & Services Pvt. Ltd. 12	G.S. Raghav	gajendos.Raghav@dmg-mori.com 987198258	

Attendance of Pre Bid Meeting of NCB for supply of 10 lots of Machines and Equipments for IGTR Aurangabad and CTTC, Bhubneshwar, held on 21.05.2015, 3.00 PM

S.No.	Name of the Organization	Name of the Representative & Designation	E-mail Address, Mobile No	Fax, Signatures
13.	FRANCO DNA Electronics SA Spain 13	DHARENDER LAR Manager,	dk.vasdev@Franus klem.in 9312070517	
14.	Macro Corporation (P) Ltd. Rep. of MIS Storage 14	A K Verma DGM	akverma@macrocorporation.com 9313375198	
15	MIC Craft Man Machinery (P) Ltd 15	Raneshwar Verma DGM Surjeet Singh Negi	9958033990 9958617733	 
16.	Cadens worth India Limited. 16	V. Janardanan, DGM janardanan.voukat @cadensworth.com Mukesh.kumar@cadensworth.com	9363094897	
17	MANOJ JAIN ADROITEC 17	MANOJ JAIN manoj.jain@ adroitinfo.com	9911212065	
18.	Rony Chadda Morelos, USA. 18	Rony Chadda Equipire Machine Tools, Delhi	9818290376	

Attendance of Pre Bid Meeting of NCB for supply of 10 lots of Machines and Equipments for IGTR Aurangabad and CTTC, Bhubneshwar, held on 21.05.2015, 3.00 PM

S.No.	Name of the Organization	Name of the Representative & Designation	E-mail Address, Mobile No	Fax, Signatures
19	EST Engineers Pvt. Ltd. 19	SANTOSH MISHRA Sr. Mgr.	santoshmishra @ stengineers.com 9311131778	Santosh
20	Maveric Solution Inc 20	ANKUR JAIN Techno Commercial manager	ankur @ mavericsolution .com 9811507940	Ankur
11	11	ANUJ KUMAR Director	anuj @ mavericsolution .com 9818209042	Anu