



ODISHA SPACE APPLICATIONS CENTRE (ORSAC)

Plot No-45/48 (P), Jaydev Vihar, Near Gopabandhu Academy of Administration,

UNIT-16, Bhubaneswar -751023, Odisha, India.

email. – orsac.od@nic.in, orsac2012@gmail.com

TENDER NOTICE: No 16/22 Date 21-12-2022

On behalf of Director land Records and Survey (DLRS) , Odisha , Revenue and Disaster Management Department, Govt. of Odisha, Odisha Space Applications Centre (ORSAC), Bhubaneswar invites sealed Tenders from the Vendors / Firms having working experience in the Geo-spatial Mapping of Cadastral Plots from the ortho-rectified High-Resolution Satellite Imagery / Aerial Imagery and survey using DGPS/ETS for the “Selection of Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed Villages of the State of Odisha using High-Definition Satellite Ortho Imagery, digitised old cadastral maps of the adjoining Villages / Available GIS Cadastral Layers and field survey using DGPS / ETS”. The detailed methodologies are given in this Tender.

Important Dates

Availability of Tender document in the website from	22-12-2022, 11.00 A.M
Pre-Bid Meeting	05-01-2023, 11.00 A.M
Last Date for Submission	19-01-2023, 5.00 P.M
Technical Bid Opening & Presentation	20-01-2023, 11.00 A.M
Financial Bid Opening	21-01-2023, 03.30 P.M

The Tender is available in the website of ORSAC i.e. <https://www.orsac.gov.in> and Govt. of Odisha. <https://odisha.gov.in> and one can take the printouts from the portals and submit the Tender with the tender cost.



G. K. Mohanta
21-12-2022
CHIEF EXECUTIVE
ORSAC

1. Introduction

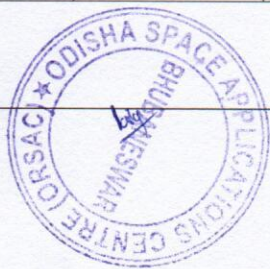
The Chief Executive, Odisha Space Applications Centre invites sealed Tenders for selection of Selected Vendor / Vendors / Agencies to generate new Cadastral Maps / Layers and Record of Rights (ROR) for un-surveyed Villages of the State of Odisha utilising High-Definition Satellite Ortho Imagery, available digitised old Cadastral Maps of the adjoining villages / GIS cadastral layers and field survey using DGPS / ETS. *This initiative is taken as per the guideline of Digital India Land Record Modernisation Programme (DILRMP) of Govt. of India.* The work is only to be carried out by the vendor using his own men and machines only at a secured Place of ORSAC campus preferably in the Annex Building of Odisha Space Applications Centre (ORSAC), **and no off-site works are allowed.** All the deployed machines are to be fully security cleared as per the IT security protocol of ORSAC. This work will be carried out as per the requirements of Director of Land Records and Survey (DLRS), Cuttack of Revenue & Disaster Management Dept, Govt. of Odisha. Odisha Space Applications Centre will carry out the all necessary Quality Assurance / Quality Checking at different stages of the work. The deliverables will be handed over to DLRS after QA and QC by ORSAC. The vendor shall be responsible for the correctness of all the deliverables. The detailed scope and methodology are given in the Tender.

The list of un-surveyed villages under different Districts are given in the following table.

Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
1	Jagatsingpur	Biridi	Basandara	Biridi	44
2		Kujang	Aganasi	Paradeep	33
3		Kujang	Baharataradia	Kujang	59
4		Kujang	Bahartari	Kujang	60
5		Kujang	Balidia	Paradeep	7
6		Kujang	Bijaychandrapur	Paradeep	35
7		Kujang	Jhimani	Paradeep	15
8		Kujang	Kaduapallikandha	Kujang	18
9		Kujang	Katakula	Paradeep	29



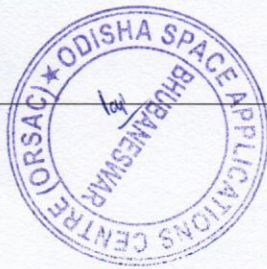
Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
10		Kujang	Kathaada	Paradeep	10
11		Kujang	Keruadiakandha	Paradeep	19
12		Kujang	Koldia	Kujang	242
13		Kujang	Musadia	Paradeep	36
14		Kujang	Nuagarh	Paradeep	32
15		Kujang	Pitambarpur	Paradeep	11
16		Kujang	Siju	Paradeep	23
17		Kujang	Udayachandpur	Paradeep	20
18	Jajpur	Binjharpur	Ajipur	Jajpur	447
19		Binjharpur	Alkund	Jajpur	430
20	Jajpur	Binjharpur	Andhalo	Jajpur	555
21		Binjharpur	Arei	Jajpur	456
22		Binjharpur	Badasingha	Jajpur	448
23		Binjharpur	Balabhadrapur	Jajpur	418
24		Binjharpur	Balichandrapur	Jajpur	438
25		Binjharpur	Barapada	Jajpur	546
26		Binjharpur	Binjharpur	Jajpur	536
27		Binjharpur	Bitana	Jajpur	434
28		Binjharpur	Chikana	Jajpur	541
29		Binjharpur	Dadhibamanpur	Jajpur	444
30		Binjharpur	Diatikiri	Jajpur	545
31		Binjharpur	Fatehpur	Jajpur	617



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
32		Binjharpur	Guhali	Jajpur	470
33		Binjharpur	Haladidiha	Jajpur	624
34		Binjharpur	Jaimara	Jajpur	452
35		Binjharpur	Kapila	Jajpur	550
36		Binjharpur	Karapada	Jajpur	416
37		Binjharpur	Kharadipur	Binjharpur	194/1
38		Binjharpur	Koreipraharajpur	Jajpur	450
39		Binjharpur	Lenkasahi	Jajpur	461
40		Binjharpur	Madhapur	Jajpur	539
41		Binjharpur	Mashara	Jajpur	552
42		Binjharpur	Nuagan	Jajpur	420
43		Binjharpur	Pairakha	Jajpur	460
44		Binjharpur	Ransha	Jajpur	153
45		Binjharpur	Rudrapur	Jajpur	559
46		Binjharpur	Samalpur	Jajpur	562
47		Binjharpur	Sasanda	Jajpur	453
48		Binjharpur	Sasanpada	Jajpur	543
49		Binjharpur	Sayedpur	Jajpur	537
50		Binjharpur	Sisirana	Jajpur	558
51		Binjharpur	Udrang	Jajpur	445
52		Binjharpur	Uttangara	Jajpur	444
53		Binjharpur	Uttarkul	Jajpur	428



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
54		Danagadi	Badasulidiha	Jakhapura	188
55		Danagadi	Chandia	Kalinganagar	195
56		Danagadi	Daniabar	Jajpur Road	490
57		Danagadi	Dasamania	Jakhapura	193
58		Danagadi	Dhananjaypur	Kalinganagar	81
59		Danagadi	Dhuligarh	Jajpur Road	230
60		Danagadi	Godigotha	Jajpur Road	238
61		Danagadi	Golagan	Kalinganagar	174
62		Danagadi	Jakhapura	jakhapura	197
63		Danagadi	Jamupasi	Kalinganagar	82
64		Danagadi	Kacherigan	Jakhapura	194
65		Danagadi	Manadapada	Kalinganagar	76
66		Danagadi	Managobindapur	Jajpur Road	233
67		Danagadi	Manatira	Jakhapura	191
68		Danagadi	Mangalpur	Jajpur Road	221
69		Danagadi	Manoharpur	Jakhapura	189
70		Danagadi	Nadiabhanga	Kalinganagar	84
71		Danagadi	Panchabatia	Jakhapura	187
72		Danagadi	Rabana	Jakhapura	192
73		Danagadi	Rachhipur	Jajpur Road	489
74		Danagadi	Ranagundi	Kalinganagar	79
75		Danagadi	Sulia	Kalinganagar	80



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
76		Darpan	Barada	Badachana	984
77		Darpan	Charinangal	Dharmasala	1214
78		Darpan	Kalasri	Dharmasala	1213
79		Darpan	Palei	Badachana	1226
80		Darpan	Panasudha	Badachana	1228
81		Darpan	Patarajpur	Badachana	1180
82		Dasarathpur	Bamdevpur	Jajpur	269
83		Dasrathapur	Ahiyas	Mangalpur	385
84		Dasrathapur	Baruaadi	Jajpur	237
85		Dasrathapur	Kanikapada	Mangalpur	360
86		Dasrathapur	Kuamadei	Jajpur	260
87		Dharmasala	Goliamuhanpatana	Dharmasala	551
88		Dharmasala	Kabatabandha	Dharmasala	527
89		Jajpur	Bachhiari	Jajpur	246
90		Jajpur	Badabanta	Jajpur	181
91		Jajpur	Bindhana	Jajpur	37
92		Jajpur	Bulakipur	Jajpur	183
93		Jajpur	Chitahata	Jajpur	50
94		Jajpur	Dhanipur	Jajpur	158
95		Jajpur	Gothapur	Jajpur	164
96		Jajpur	GoudasahiGobindapur	Jajpur	177
97		Jajpur	Kamalapur	Jajpur	161



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
98		Jajpur	Kiareswar	Jajpur	264
99		Jajpur	Kodandapur	Jajpur	265
100		Jajpur	Merakahasanpur	Jajpur	175
101		Jajpur	Mirzapur	Jajpur	180
102		Jajpur	Nakhei	Jajpur	171
103		Jajpur	Nityandapur	Jajpur	51
104		Jajpur	Oliepada	Jajpur	178
105		Jajpur	Sathiatikiri	Jajpur	172
106		Jajpur	Similia	Jajpur	176
107		Jajpur	SukadeitiPaschimabila	Jajpur	198
108		Sukinda	Baragadia	Dharamasala	236
109		Sukinda	Duburi	Dharamasala	86
110		Sukinda	Gadpur	Dharamasala	196
111		Sukinda	Gobarghati	Dharamasala	141
112		Sukinda	Khurunti	Dharamasala	234
113		Sukinda	Mirigachara	Dharamasala	173
114		Sukinda	Nuagan	Dharamasala	235
115		Sukinda	Sarangapur	Dharamasala	237
116		Sukinda	Saransa	Dharamasala	85
117		Vyasanagar	Khandahata	Dharamasala	246
118	Jharsuguda	Jharsuguda	Bhursund	Jharsuguda	44
119		Lakhanpur	Balanda	Lakhanpur	57



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
120		Lakhanpur	Barangmal	Banharpali	7
121		Lakhanpur	Batлага	Banharpali	4
122		Lakhanpur	Bhatli	Banharpali	6
123		Lakhanpur	Bhejikud	Banharpali	3
124		Lakhanpur	Binka	Banharpali	2
125		Lakhanpur	Chhadarama	Banharpali	1
126		Lakhanpur	Duanmunda	Rengali	76
127		Lakhanpur	Ghungutpali	Rengali	73
128		Lakhanpur	Gudam	Rengali	78
129		Lakhanpur	Kusmel	Rengali	74
130		Lakhanpur	Lachhipali	Rengali	75
131		Lakhanpur	Lemeitikra	Lakhanpur	58
132		Lakhanpur	Padampur	Rengali	72
133		Lakhanpur	Patrapali	Lakhanpur	56
134		Lakhanpur	Rampaluga	Lakhanpur	60
135		Lakhanpur	Sahasbaga	Rengali	77
136		Lakhanpur	Sartang	Banharpali	5
137	Kalahandi	Dharmagarh	Ambaguda	Dharmagarh	70
138		Dharmagarh	Bagad	Dharmagarh	69
139		Dharmagarh	Dabripadar	Dharmagarh	79
140		Dharmagarh	Ghumer	Dharmagarh	71
141		Dharmagarh	Godbhanja	Dharmagarh	54



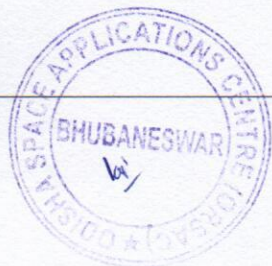
Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
142		Dharmagarh	Jayantpur	Koksara	3
143		Dharmagarh	Kermunda	Dharmagarh	26
144		Dharmagarh	Kirkakani	Dharmagarh	33
145		Dharmagarh	Nandagaon	Dharmagarh	92
146		Dharmagarh	Radhakrushnapur	Koksara	4
147		Dharmagarh	Tarapur	Koksara	15
148		Dharmagarh	Tipiguda	Dharmagarh	32
149		Golamunda	Brundabahal	Golamunda	21
150		Golamunda	Chilgaon	Golamunda	27
151		Golamunda	Dhamanpur	Golamunda	3
152		Golamunda	Goindimunda	Golamunda	19
153		Golamunda	Golamunda	Golamunda	7
154		Golamunda	Manjhari	Golamunda	1
155		Golamunda	Patialpada	Golamunda	12
156		Jaipatna	Amjore	Th Rampur	23
157		Jaipatna	Baner	Jaipatna	19
158		Jaipatna	Beheransil	Jaipatna	1
159		Jaipatna	Bhalujore	Jaipatna	47
160		Jaipatna	Bijamara	Jaipatna	47
161		Jaipatna	Chachiguda	Jaipatna	30
162		Jaipatna	Dulkibandh	Jaipatna	46
163		Jaipatna	Hirapur	Jaipatna	44



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
164		Jaipatna	Jaipatna	Jaipatna	25
165		Jaipatna	Jariguma	Jaipatna	34
166		Jaipatna	Kadopadar	Jaipatna	20
167		Jaipatna	Karlakot	Jaipatna	130
168		Jaipatna	Kenduguda	Jaipatna	137
169		Jaipatna	Khaliabhata	Th Rampur	5
170		Jaipatna	Kuchagaon	Jaipatna	29
171		Jaipatna	Mangalpur	Jaipatna	55
172		Jaipatna	Nalkaniguma	Th Rampur	24
173		Jaipatna	Nuaguda	Jaipatna	48
174		Jaipatna	Paikbahal	Jaipatna	36
175		Jaipatna	Palas	Jaipatna	3
176		Jaipatna	Pandripakhan	Jaipatna	7
177		Jaipatna	Patrabasa	Jaipatna	81
178		Jaipatna	Pipalguda	Jaipatna	153
179		Jaipatna	Pipalguda	Jaipatna	2
180		Jaipatna	Podakhol	Jaipatna	32
181		Jaipatna	Polkamunda	Jaipatna	21
182		Jaipatna	Pratap Pur	Jaipatna	40
183		Jaipatna	Pujhariguda	Jaipatna	4
184		Jaipatna	Rengalpali	Jaipatna	21
185		Jaipatna	Talpadar	Jaipatna	9



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
186		Jaipatna	Uchhala	Jaipatna	8
187		Junagarh	Beheraguda	Junagarh	168
188		Junagarh	Borguda	Junagarh	68
189		Junagarh	Chhuriagarh	Junagarh	141
190		Junagarh	Chilguda	Junagarh	205
191		Junagarh	Dasigaon	Junagarh	173
192		Junagarh	Dedara	Junagarh	65
193		Junagarh	Goudchhendia	Junagarh	159
194		Junagarh	Hinjilibahali	Junagarh	104
195		Junagarh	Junagarh	Junagarh	92
196		Junagarh	Junagarh Nazul	Junagarh	92/207
197		Junagarh	Kalopala	Dharmagarh	83
198		Junagarh	Koelgaon	Junagarh	87
199		Junagarh	Kusumbara	Junagarh	62
200		Junagarh	Labanipur	Junagarh	50
201		Junagarh	Mundraguda	Junagarh	165
202		Junagarh	Pragatinagar	Junagarh	90
203		Junagarh	Sureli	Junagarh	61
204		Junagarh	Taladhunda	Junagarh	203
205		Kalahandi	Arkahalipada	Bhawanipatna	151
206		Kalahandi	Bhawanipatna	Bhawanipatna	152
207		Kalahandi	BhawanipatnaNazul	Bhawanipatna	152/326



Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
208		Kalahandi	Naktiguda	Bhawanipatna	150
209		Kalahandi	Paramanandapur	Bhawanipatna	165
210		Kalahandi	Purnapada	Bhawanipatna	144
211		Kalahandi	Sitabordi	Bhawanipatna	164
212		Karlamunda	Dukermal	M Rampur	18
213		Kesinga	Bagad	Kesinga	38
214		Kesinga	KesingaNazul	Kesinga	39/125
215		Kesinga	Kesinga Town	Kesinga	39
216		Koksara	Batiguda	Koksara	57
217		Koksara	Dhobendchanchara	Koksara	66
218		Koksara	Kulerguda	Koksara	36
219		Koksara	Ladugaon	Koksara	82
220		Koksara	Sannegiguda	Koksara	39
221		Koksara	Temra	Koksara	37
222		Th Rampur	Chingidipas	Th Rampur	75
223		Th Rampur	Digribandha	Th Rampur	62/259
224		Th Rampur	Jhirigaon	Th Rampur	55/261
225		Th Rampur	Kumudasil	Th Rampur	46/262
226		Th Rampur	Mahulpatna	Th Rampur	77/258
227		Th Rampur	Nagi	Th Rampur	95/260
228		Th Rampur	Padepadar	Th Rampur	54
229		Th Rampur	Podapadar	Th Rampur	55/264



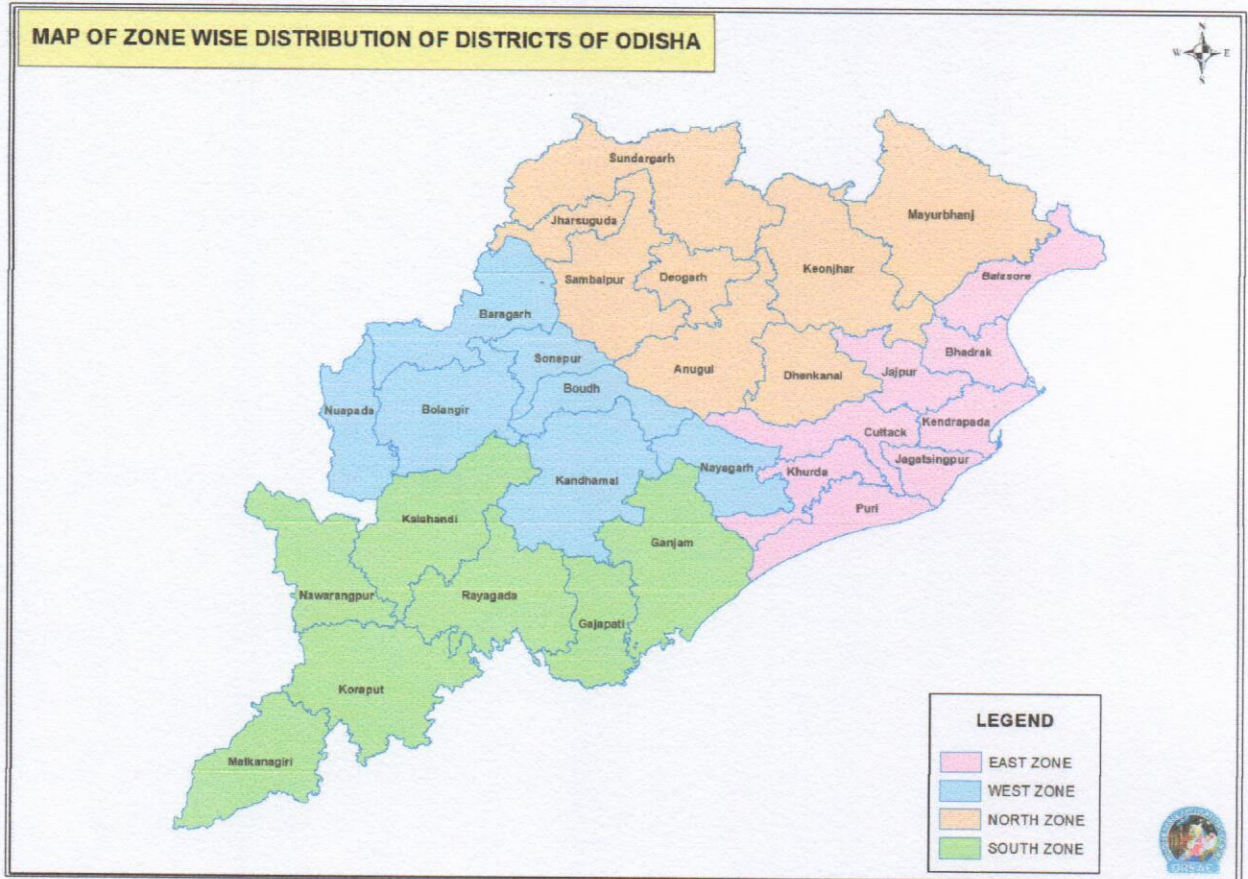
Sl. No	Name of the District	Name of the Tahasil	Name of the un-surveyed Village	Name of the Thana	Thana No
230		Th Rampur	Sukuli	Th Rampur	98
231		Th Rampur	Tentulipadar	Th Rampur	142
232	Kendrapada	Rajnagar	Bagapatia	Rajnagar	314/1
233		Rajnagar	Vecta	Talachua Marine	260
234	Jajpur	Binjharpur	Badapal	jajpur	467
235	Jajpur	Binjharpur	Banshipur	Binjharpur	119/1
236	Jajpur	Dasarathpur	Tarangasagarpur	Mangalpur	286
237	Kalahandi	Jaypatna	Chirka	Jaipatna	24
238	Kendrapara	Derabish	Basupur	Kendrapara	287
239	Kendrapara	Derabish	Raghudeipur	Derabish	17
240	Kendrapara	Kendrapara	Bhramardiapatana	Sadar	130
241	Kendrapara	Kendrapara	Dhumata	Nikirai	161
242	Kendrapara	Kendrapara	Indupur	Nikirai	160
243	Kendrapara	Marshaghai	Dukuma	Marshaghai	530

The entire State is divided in four (4) zones i.e. East, West, North and South. The zone wise distribution Map of the Districts is given below.

No vendor will be allotted more than two zones based on their preference given in their Finance Bid and all the Bidders are to agree to execute the work in the unit cost selected through this Quality and Cost Based System (QCBS) Tender. Consortium Bids are permitted involving maximum of two firms in a consortium. The Lead bidder of the Bid will be fully responsible for all Deliverables and payments will be made only to the Lead bidder.



The bidders may submit their responses against in prescribed manner through Registered post / Speed Post / Courier/ messenger only to reach the CHIEF EXECUTIVE, Odisha Space Applications Centre (ORSAC), Bhubaneswar latest by **5.00 PM** on dated: **19-01-2023**. The Chief Executive, ORSAC shall not be responsible for any postal or courier delays.



2. Critical and Important Information:

- A) The Vendors are advised to study this document very carefully before submitting their proposals in response to the Tender Notice. Submission of response against the Tender notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.
- B) The Vendors are requested to attend a pre-bid conference on **05-01-2023, 11.00 A.M** as per details provided below.

SL No	Information	Details
1	Tender Call Notice No and Date:	
2	Last date for submission of written queries/ email queries for clarifications	04-01-2023, 05.00 P.M
3	Date of pre-bid conference	05-01-2023, 11.00 A.M



SL No	Information	Details
4	Tender Fee	Rs.1,000.00
5	Earnest Money deposit	Rs. 3, 00,000.00
6	Last date for submission of Bids	19-01-2023, 5.00 P.M
7	Technical Bid opening & Presentation	20-01-2023, 11.00 A.M
8	Practical demonstration of vectorisation of plots using ortho image and Active Area of Interest (AOI)	20-01-2023, 03.00 P.M to 04.00 P.M
9	Addressee and Address at which Bid is to be submitted	Chief Executive, ODISHA SPACE APPLICATIONS CENTRE (ORSAC) (Department of Science & Technology, Government of Odisha) Plot no. 45/48 (Part), Jayadev Vihar, Near Gopabandhu Academy of Administration Unit-16, Bhubaneswar- 751 023, Odisha.
10	Financial Bid opening	21-01-2023, 03.30 P.M

3. Scope of Work

The Project will cover all un-surveyed Villages of the State of Odisha. The approximate area that is to be surveyed against the un-surveyed Villages are given in the Table under Clause-1 (Page-2-14). The selected Vendors will do following work.

- A. Generation of Digital Cadastral Map/Layer under Un-Surveyed Villages as per the methodology given in the Tender.
- B. However, the payment will be made as per actual area (final village map preparation) of survey. Price to be quoted as per Sq. Km. for above work.

3.1 Methodology for Plot Boundary Vectorisation & updated, Resurvey Cadastral Map Preparation for the Un-surveyed Villages of the Odisha State.

A. Procedure:

1. The selected Vendor has to carry out a reconnaissance survey of the un-surveyed village with the Revenue Officials of the District to have a preliminary knowledge about the geographical area,



Land Type and its surrounding villages. The Vendor shall note down the surrounding Revenue Villages of the Un-Surveyed Village.

2. Geo-referenced village Maps, Boundaries in the form of shape files for the adjoining villages of the Un-surveyed Village / Villages and High-Definition (HD) Satellite Ortho Images of Maxar of the period 2021-2022 of those Un-Surveyed Villages will be provided to the selected Vendor / Vendors by ORSAC in the working area identified by ORSAC inside **ORSAC Premise**. Where geo-referenced maps are not available, ORSAC will provide the .DWG files and the respective .CAL files for those villages, even if where .DWG files are not available, the scanned files of those villages in the form of .CAL files would be provided. The selected Vendor has to thoroughly digitise the plot polygons using scanned files (.CAL files), convert the .DWG to .shp files and have to geo-reference the shape files using HD ortho images to be supplied by ORSAC.

3. The adjoining cadastral village shape files are to be geo-referenced with the HD ortho-image matching the permanent and cultural features / plot polygons within the village which have not been changed in the field over the period of time and are clearly visible both in the HD ortho-image as well as in the digitized cadastral map. Roads, drainage/ water bodies, temples, old plots, cross section of narrow roads, bund cross section of parcels are examples of such features used for the purpose. It is desired that such features should be distributed throughout the village. Minimum four such distributed points are to be used to geo-rectify the cadastral vector. While transforming the vector to the ortho-image, the geometry of the original plots in the cadastral vector shall not be changed much.

4. The delineation of the village boundary around the Un-Surveyed Village is to be done by superimposing the geo-referenced village boundary along with its adjacent geo-referenced village cadastral vector on the ortho-image, where utmost care should be taken for the parcels of adjacent village, which should not be omitted by the new village boundary delineation. The boundary vector at edge plots on the ortho-image may be slightly adjusted to ensure seamless meeting of boundaries of adjacent villages without any gap or overlapping subject to non-displacement of cultural features already fixed.

5. The selected Vendor / Vendors will rectify the error in village boundaries and will delineate the correct village boundaries around the un-surveyed village where-ever necessary by confirming it from the field in consultation with field functionaries of the concerned Tahasil. The area of the newly generated un-surveyed village map will also be computed.

6. The **QC-1** is to be done by ORSAC covering geo-referencing, boundary delineation and village boundary confirmation. The geo-referenced village boundaries of the surrounding villages of the Un-Surveyed Village with the parcels and un-surveyed village boundary are to be submitted to ORSAC in the form of .shp file.



7. ORSAC has to verify the computed area of the un-surveyed village with reference to the HRSI Imagery as well as taking the surrounding geo-referenced village Boundaries. ORSAC has to finally certify the area of the un-surveyed village boundary.

8. The selected Vendor / Vendors are to establish minimum two Secondary Ground Control Points (SCP) inside the village Boundary in the Government Premise as per the Guide Line attached in the Annexure of the Tender. The GCPs are to be used as the base line for carrying out DGPS/ETS survey for the obscured areas inside the village.

9. The selected Vendor / Vendors are to measure Latitude, Longitude and Altitude (Orthometric Height using the latest Earth Gravity Model) using Dual Frequency DGPS Survey for minimum four (4) hours observation, if the distance from the Primary Control Point to Secondary Control Point is 50 Km else eight (8) hours for those two GCPs in conjunction with Survey of India (SOI) / ORSAC Primary Control Points available nearby. The Processing of the DGPS Survey shall be done inside ORSAC Premise. The Primary Control Point values (Latitude, Longitude & Altitude) will be provided by ORSAC while processing in the ORSAC Premise. Available Certified CORS service of SOI or ORSAC can be used by the selected vendors for creation of Ground Control Points and DGPS Survey of obscured plot polygons.

10. Interpretation and extraction of Parcels & features within the confirmed un-Surveyed Village are to be done from the HD Ortho Image, devoid of obscurities following 'Mirror Principle'.

11. DGPS and or ETS survey of obscured and "Gharabari" parcels not interpretable from HD Ortho-Image has to be carried out by the selected Vendor / Vendors from the field. GCPs already established will be used for the purpose. 3 or 4 auxiliary control points as may be necessary should be established near the village under survey. Survey of 'Gharabari' parcels should be made section-wise, and in each section, survey should start and end in a control point. The sketch map of gharabari areas shall be provided by the vendor during the survey to the concerned officials of Tahsils. The Gharabari areas will be surveyed by ETS and its map will be prepared in a scale as may be required by Revenue Department. However, the vector generated through ETS survey will have to be integrated into the image generated vector to generate complete cadastral map of a village. The topology of the polygons is to be validated to ensure the layer is devoid of gaps/slivers. The Gharabari area parcels survey will have to be authenticated by the concerned Tahasildar/ Settlement Officer before integration. The detailed procedure is available in Standard Operating Procedure (SOP), which can be downloaded from Revenue & Disaster Management Website for reference.

12. The Selected Vendor / Vendors has to assign the Plot numbers of each plot for Preliminary Draft Village layer in consultation with the Revenue Officers of the Tahasil.

13. Preliminary Draft Village Map vector will be verified during QC II stage at ORSAC. After verification at ORSAC the selected Vendor / Vendors will be allowed to submit the Preliminary Draft Village Map to the concerned Tahasildars for verification of Rule 7(3) at village level along with a



copy of the field book comprising of the dimensions of each Revenue Plot to Tahasildars. If any discrepancies found during QC checking, the selected Vendor / Vendors has to rectify the same before submission of the Preliminary Draft Village Map and will not be allowed to proceed further to the next stage of work.

14. The selected Vendor / Vendors will submit the draft village vector in shape file, Village map composition in .MXD format for all surveyed data collected from field in RAW and processed format, Preliminary Draft Village Map in soft copy (.jpg or .pdf), geo referenced old cadastral maps of the concerned village in CD/DVD (three copies) to ORSAC, out of which, one copy will be sent to DLRS and the second copy is to be sent to the concerned Tahsildar by ORSAC and third copy will be retained by ORSAC.

15. After verification of Preliminary Draft Village Map by the revenue field staff, the map has to be updated as per their direction. If necessary the ground coordinates have to be taken using DGPS / ETS as shown/ demarcated by the field staff to update the map.

16. The corrected map with requisite no. of hard copy maps as mentioned in the Standard Operating Procedure (SoP) along with form 6T (comparison sheet of plot wise descriptions) has to be submitted to Tahasildar for display under Rule 7(6) and verification under Rule 9(4) for the village.

17. The selected Vendor / Vendors shall assist the Tahasil officials for land record preparation and identification of Govt. land and common property resources under Rule 9(4) and updating of map thereof. If necessary at this stage, the ground coordinates have to be taken using DGPS / ETS as shown/ demarcated by the field staff to update the village map.

18. The selected Vendor / Vendors has to collect the land record data of the village from the field team and prepare the Preliminary Record of Rights using NIC frontend software. The selected Vendor / Vendors has to prepare the Preliminary Record of Rights and Land Parcel Map (LPM) in appropriate format and no. of copies as mentioned in the SoP and to distribute among the tenants after authentication by Tahasildar with the help of field team. The Selected empaneled Vendor / Vendors has to carry out the data entry work using NIC Template in Odia language at Tahasil level.

19. The selected Vendor / Vendors shall update the land record and map at different stages of Settlement Process under Odisha Special Survey and Settlement Act and Rule, 2012 after dispute resolution by the concerned revenue officers. There may be some cases of field measurement of parcel dimensions as per direction of Tahasildars/ Addl- Sub Collector. This work will be done at village level.

20. Correction of Maps & Records as per direction of Tahasildars/ Addl- Sub Collector Preparation of Final Village Map and Registers in standard template as prescribed in the Rule and SoP.

21. However, before publication final village map, it shall be submitted to ORSAC to verify the topology of the village vector in conjunction with the adjacent villages (seamless). If any changes



observed in the map/record the same will be intimated to DLRS by ORSAC for due correction/modification.

22. The selected Vendor / Vendors shall assist the concerned Revenue officers during dispute resolution, maintenance of registers and serving of notices. The selected Vendor / Vendors shall submit the deliverables in hard copy in different stages as per the SoP and OSS Rules, 2012 and softcopies as mentioned.

23. Creation of some additional layer files described in the table below in the form of point/line/polygon other than parcel boundary required under this project.

24. Creation of GIS symbology file for the cadastral symbols as decided (to be) for the cadastral map. Vendor has to finalize the symbols and data model and spatial framework and the projection by consulting ORSAC / Joint Director, Survey & Map Publication, Cuttack.

25. The entire GIS Output of this project will be hosted from NIC Server, as NIC, Bhubaneswar is the Technological Partner of R & DM, Dept., Govt. of Odisha for storing and hosting the Records and Cadastral Maps. The Vendor has to provide necessary support as required by NIC, Bhubaneswar.

26. However, the scope as mentioned above is indicative in nature and the selected Vendor / Vendors has to follow the Odisha Special Survey & Settlement Act & Rule – 2012, Technical Manual I and Technical Manual II (SoP) subject to modification as and when required for smooth functioning of the work by Chief Executive of ORSAC and Director of Land Records & Surveys and Revenue & Disaster Management Department, Govt. Of Odisha (available at Revenue and Disaster Management Department, Government of Odisha Website).

B. Deliverables:

The vendor has to submit the following soft copy deliverables 3 copies of CDROM/DVD, one copy for CE, ORSAC, second copy for the concerned Tahasildar and third copy for Director of Land Records & Survey, Odisha, Cuttack.

1. All surveyed data in raw and processed format at every Stages – intermediate deliverables at each QA/QC Stages in .shp/.dwg/UNICODE/RINEX etc.
2. Resurvey / Updated cadastral for the un-surveyed Village vector layer(s) in .shp file format – final deliverable
3. Updated and corrected ROR data in NIC format (UNICODE) – final deliverable
4. Geo-referenced cadastral files for the surrounding villages of the un-surveyed village in .shp format – final deliverable
5. Final resurveyed un-surveyed village in .jpgs or tiffs and ARCGIS .mxd file.
6. Final RoR in UNICODE format of NIC (or any database format as to be decided by CE, ORSAC)



7. The entire GIS Output of this project will be published in NIC, Bhubaneswar Platform to be hosted from NIC, Bhubaneswar Server.

8. Any other as per the requirements of this project.

Deliverables in hard copies at different stages of verification:

1. Draft preliminary Map (90 GSM) & Field Book (75 GSM): One copy each for 7(3) & 9 (4) verification and Field Book containing measurement of Plot Dimensions.

2. **For display of Map u/r- 7(6) and office copy of updated Maps (90 GSM):**

- | | | |
|----|---------------------------------------|--------------|
| a. | Updated 7(3) Map (90 GSM) for display | - Two Copies |
| b. | Working Copy for 9(4) | - One Copy |
| c. | Data Sheet in form- 6T (75GSM) | - One Copy |

3. **After completion of 9(4) verification by the team:**

- | | | |
|----|------------------------------------|----------------|
| a. | Preliminary RoR (Form- 7 (75 GSM)) | - Three Copies |
| | To Tenants | - One Copy |
| | To Display | - One Copy |
| | Office Copy | - One Copy |
| b. | Land Parcel Map (LPM) (75 GSM) | - Two Copies |
| | To Tenants | - One Copy |
| | Office Copy | - One Copy |
| c. | Updated Map (90 GSM) | -Two Copies |
| | Office Copy | - One Copy |
| | To Display | - One Copy |

4. **After Objection hearing by Tahsildar:**

- | | | |
|----|------------------------------|---------------|
| a. | Draft RoR (Form 12) (75 GSM) | - Four Copies |
| | To Display | -Three Copies |
| | Office Copy | -One Copy |

(Certified copies will be given to interested parties)



- | | | |
|----|----------------------|---------------|
| b. | Updated Map (90 GSM) | - Four Copies |
| | To display | -Three Copies |
| | Office Copy | - One Copy |

5. **After Objection disposed of by the Sub- Collector:**

- | | | |
|----|---------------------|---|
| a. | Final RoR (Form-20) | - Seven Copies (4 Green Copies as per CE, ORSAC Standard & 3 white Copies in 75 GSM) |
| b. | Final Map | - Seven Copies
(Three copies for display (90 GSM), three copies for official record (120 GSM) & one copy for distribution (120 GSM). |

6. **Any other things as required in SOP.**

C. **Project Duration:** The Project duration is Six (Six) months. District and Tahasil wise list of un-surveyed villages is given from Page-2 to Page-14 of the Tender for calculation of the efforts and time of completion by taking all the steps into consideration. The Vendor has to submit Village wise a time schedule plan for completion of the Task. Based on which the Sq. Km rate are to be fixed by the Vendor / Vendors).

- I. The Selected empaneled Vendor / Vendors has to submit the list of work force deployment.
- II. List of existing DGPS / ETS instruments available with the Vendor or procurement to be done under the Project to execute the Project within the stipulated time. The vendor has to submit an undertaking regarding the Procurement of additional DGPS/ETS required under the Project.

D. Quality Assurance: (QA)

Since these survey records will form the basis of the conclusive titling system, they must be prepared with utmost care and accuracy. Hence, the vendor shall put in place a strict & rigid internal system of quality check to ensure that vector data are accurate as per the standards mentioned above.

E. Quality Checking: (QC)

A comprehensive quality control SOP and Check-List for ensuring the quality of data has to be followed to ensure an error free village cadastral map. QC Check-List are to be signed by the Vendor.

F. QA & QC by ORSAC

The vendor has to deposit the products with ORSAC in different stages as detailed out in methodology above / Technical Manual / SOP to carry out QA & QC by ORSAC. The Vendor



has to adhere the instructions of the Scientists, ORSAC entrusted for QA & QC job and incorporate necessary corrections and resubmit modified output for further QA& QC till it is accepted by ORSAC. The accepted output is to be submitted to ORSAC as per the criteria mentioned under delivery clause.

G. Work Place:

The Vendor has to carry out work at the Annex Building of ORSAC, which is fully furnished with A/C, Computer-Tables, Chairs, LAN, Generator, UPS, lighting and Security. The monthly electric Bill consumed by the selected Vendor as per actual is to be borne by the Vendor and the amount is to be deducted from the bills by ORSAC with due communication to the Vendor and monthly per square feet charge as approved by PWD, Govt. of Odisha for using the full furnished working space inside ORSAC is to be deducted from the bill of the Vendor with due communication to the Vendor. The personnel engaged by the selected Vendor for this project shall abide all security rules and regulations of ORSAC. Nobody will be allowed to carry their personal computer, laptops, hard disks, thumb / flash drives, all removable media etc.

4. Tender Fee

The Tender document will be available from ORSAC and Odisha Govt. Portal. Any Vendor interested to bid for this Project may download the Tender Bid from ORSAC/Odisha Govt. Portal or can get directly from ORSAC within the Official Hours (10.00 A.M – 05-30 P.M) by paying directly the Tender Fee. The Vendors has to pay the cost of Tender fee of Rs. 1,000/- (Rupees One Thousand Only) in shape of a Demand Draft from any scheduled bank, payable at Bhubaneswar in favour of the Chief Executive, Odisha Space Applications Centre (ORSAC). Bid submitted without the Tender Fee would be summarily rejected.

5. Earnest Money Deposit (EMD)

A refundable amount of Rs. 3,00,000.00 (Rupees Three Lakhs) only towards Earnest Money Deposit (EMD) in shape of Bank Guarantee **only from a Nationalized Bank** drawn at Bhubaneswar, Odisha Branch in the Name of Chief Executive, Odisha Space Applications Centre, Bhubaneswar, is to be submitted along with the Technical Bid. A bid submitted without the Earnest Money Deposit would be summarily rejected. The EMD of the unsuccessful bidders would be returned immediately after one month of issue of the work order to the successful bidder. The EMD of the successful bidder will be returned after submission of the performance security by the successful bidder. The EMD amount is interest free and will be refundable to the unsuccessful/ Successful bidders without any accrued interest on it.

The EMD will be forfeited:

- If a bidder withdraws its bid during the period of bid validity.
- In case the bidder violates the terms and conditions.



- In case of a successful bidder, if the bidder fails to sign the contract in accordance with this tender document.

6. Mobilization advance

No mobilisation advances are admissible in this work.

7. Eligibility Criteria (Both General and Technical)

- A) The Bidder / Consortium Bidder should be a positive Net-Worth company / firm for the preceding three financial years including FY 2021-22. The Bidder shall submit the audited accounts sheets to comply the clause.
- B) The Bidder / Consortium Bidder must have a full fledged and fully operational and production-oriented office in Odisha. If not, the bidder must submit an undertaking to have a full-fledged business class office with local employment, in Odisha within three months of receiving the workorder. Non-compliance to this will lead to Non-refundable deduction of 5% of all payments to be released to the firm.
- C) The Bidder / Consortium bidder should be in **Geospatial Survey and Mapping Business** for at least five years and shall have the experience to work using High Resolution Satellite Images like World View-II/III, IKONOS, Quick Bird, CARTOSAT-1 & 2 and also shall have the experienced staff to interpret Plot Boundary from High-Resolution Ortho Images as well as to conduct field survey using DGPS/ETS Survey. The Vendor has to submit necessary documentary evidence with respect to above compliance. The vendor may be assigned a small part of the cadastral sheet to vectorise parcel boundary using WV-II ortho image to prove its understanding of the methodology. The Bidder shall either submit the completed work experience from the respective Government Organisation or Work orders to comply the clause.
- D) Bidder / Consortium Bidder should have three years average annual turnover of more than Rs. 5.00 Crores) (Rupees Five Crores) relating to Geospatial Survey and Mapping Business (Mapping Natural Resources using High Resolution Satellite Data or UAV or Aerial Photos / Generation of Ortho Images using Photogrammetric Principle / Digitization of Village level Cadastral Maps / Geo-referencing of the Village Cadastral sheets / DGPS/ETS Survey Projects etc. or related projects) for last three financial years including FY 2021-2022 to be certified by Chartered Accountant auditing the accounts of the firm. Audited Balance sheet and profit and loss account statement for last consecutive three years to be submitted along with techno commercial Bid to comply the clause.
- E) Bidder / Lead Bidder should have valid Odisha State GSTN. Documentary proof of the same shall be deposited to comply the clause.
- F) Bidder / Consortium Bidder must have executed 2 (Two) numbers of unique work orders having Minimum Contract Value of Rs.50.00 lakhs (Rs. Fifty lakhs) involving Geospatial



Survey and Mapping involving revenue cadastral maps of Odisha in last 3 (Three) financial years. The Work Orders shall be submitted to comply the clause.

- G) In last five years, the Bidder / Consortium Bidder must have Digitised, Georeferenced DGPS Surveyed and GIS mapped 1000 Ha. of lands in Odisha with respect to Revenue Cadastral Maps and linked the ROR in the GIS mapping of the DGPS surveyed area for Development Projects of Govt and Large Corporate sector. Necessary completion certificates are to be produced as credentials.
- F) The Bidder / Consortium Bidder must have adequate Geospatial Technology Proficient Manpower across Odisha for executing this project work. The list of man-power under the direct payroll of the vendor with the qualification, experience in different RS and GIS domain shall be provided to comply the clause. The Bidder shall submit an undertaking that the list of manpower provided in the list shall be available for this Project on a full-time basis till completion of the project. The Bidder shall not withdraw the staff without the knowledge of the Chief Executive, ORSAC or its authorised Officers. The Bidder shall submit an undertaking to comply the clause.
- H) The bidder / Consortium Bidder shall provide the following self-certified documents.
- I. All necessary documentary evidence to establish that the Bidder meets the above qualifying requirements.
 - II. Relevant ISO / ISI certifications to undertake the Work.
 - III. The bidder / consortium / part of the consortium should not have been black listed by any department of Govt of India / State Govt/ PSU/ Govt Selected Vendor / Vendors/ Organisations.

8. Pre-Bid

The Bidder / Consortium Bidder will have to ensure that their queries for the pre-bid meeting should reach the CE, ORSAC , Odisha by email orsac.od@nic.in / orsac2012@gmail.com in the format given below on or before **5 PM, dated: 04-01-2023**.

Sl. No.	Paragraph No. & Paragraph Head	Content requiring clarification	Clarification needed
(1)	(2)	(3)	(4)

9. How to Apply

A) Techno Commercial & Financial Bid

The interested Agencies / Firms need to submit their proposals on or before the closing date.

The proposal should comprise of following two parts:



a) Techno Commercial Bid

The technical bid would comprise of and should explain the followings strictly in the same order:

Tender document duly signed in each page with the following forms duly filled up.

- I) Executive Summary - as prescribed in Form - I
- II) Covering Letter from the Bidder in Form - II
- III) Bidder Details - as prescribed in Form - III
- IV) Manpower Details - as prescribed in Form - IV
- V) Instrument Details in the Form - V
- VI) List of Geospatial Work carried out by the Firm till date in Form - VI
- VII) Certificate of Guarantee and warranty in Form -VII
- VIII) Declaration Regarding Blacklisting/Debarring for Taking Part in Tender in Form - VIII
- IX) Mark sheet for evaluation of Presentation in Form-IX
- X) Financial Bid in Form - X
- XI) Check List in the Form - XI
- XII) Tender fee of Rs. 1,000/-
- XIII) EMD of Rs. 3,00,000/-
- XIV) Up to date GST clearance certificate.
- XV) Service registration certificate and Pan card.
- XVI) Supporting document for claim of bidder as a registered organisation or a company.
- XVII) Audited balance sheet and Profit and Loss Account for last three years including FY-2021-2022.
- XVIII) I.T return for last three assessment years.
- XIX) Proof of successful completion of at least two assignments of minimum Rs 2.00 Crores each year during last three years for the Geospatial related work mentioned above.
- XX) Enrolment number of EPF/ESI statement of the Service Engineers.

b) Financial Bid

Financial Bid should contain **Per Sq. Km. of Actual Surveyed Area on a unit-based cost**. The payment will be made as per actual area (final village map preparation) of survey. Price to be quoted as Rupees per Sq. Km. For evaluation of the financial bid, the amount indicated in words would be taken as the correct financial bid in case there is any discrepancy between the amounts indicated in



figures and in words. The bidder has strictly to use the prescribed tabulated format for financial Bid as prescribed in Form X.

10. Format & signing of proposal

- a) The Bidder / Lead Bidder of the consortium would provide all the information as per formats specified in this Tender document and any deviation from the formats shall be rejected. The Director Land Records Survey would evaluate only those proposals that are received in the required format and are complete in all respects.
- b) The forms (i to x) attached with the tender document shall be typed or written in indelible ink and each page shall be duly signed and stamped by the Bidder / Lead Bidder of the Consortium in original. Alterations, omissions, additions, or any other amendments made to the proposal shall be duly signed by the authorized signatory properly.
- c) All pages of the proposal must be sequentially numbered and shall be duly signed by the Authorized Representative of the bidder / Lead Bidder of the Consortium.

11. Language

The proposal and all related correspondence and documents should be written in the English language. Supporting documents and printed literature furnished by Bidder with the proposal may be in any other language provided that they are accompanied by appropriate translations of the pertinent passages in the English language duly certified appropriately.

12. Submission of Proposals

- a) The Bidder shall prepare and submit the Techno Commercial Bid Proposal as per the prescribed format in a separate sealed envelope, which will be superscribed "**Technical Bid for Selection of Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed Villages of Odisha using High-Definition Satellite Image for the Year, 2021-22, digitised old cadastral maps / layers and field survey using DGPS/ETS**".
- b) The Bidder shall prepare and submit one Financial Bid Proposal as per the prescribed format in a separate sealed envelope, which will be marked as "**Financial Bid for Selection of Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed Villages of Odisha using High-Definition Satellite Image for the Year, 2021-22, digitised old cadastral maps / layers and field survey using DGPS/ETS**".
- c) The Techno commercial bid and the Financial bid should be separately sealed and placed in a sealed single outer envelope superscribed with the tender no and date and marked as "**Selection of Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed Villages of Odisha using High-Definition Satellite Image**".



for the Year, 2021-22, digitised old cadastral maps / layers and field survey using DGPS/ETS" with "Bidder Name & Address" and shall be addressed to: -

Chief Executive,

ODISHA SPACE APPLICATIONS CENTRE (ORSAC)

(Department of Science & Technology, Government of Odisha)

**Plot no. 45/48 (Part), Jayadev vihar, Near Gopabandhu Academy of Administration Unit-16,
Bhubaneswar- 751 023, Odisha**

Phone: (0674)2303625/3293545, Email: orsac.od@nic.in / orsac2012@gmail.com

- d) Proposals must be received at the address specified above latest by 5.00 P.M on 19-01-2023. Any proposal received by Chief Executive (CE), ORSAC after the above deadline shall be rejected and returned unopened to the Bidder.
- e) CE, ORSAC shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.
- f) CE, ORSAC reserves the right to modify and amend the tender document through issue of corrigendum depending upon project priorities vis-à-vis urgent commitments. The bidders are allowed resubmit their bid- if required, after such amendments.
- g) CE, ORSAC may cancel the tender process in part or whole at any time and without assigning any reason.

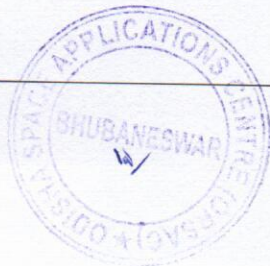
14. Completeness of Response

- a) Bidders are advised to study all instructions, forms, terms, requirements and other information in the tender document carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the Tender document with full understanding of its implications.
- b) The response to this notice should be full and complete in all respects. Failure to furnish all information required by the tender document or submission of a bid not substantially responsive to the tender document in every respect will be at the Bidder's risk and may result in rejection of its Proposal.

15. Pre-bid meeting

The CE, ORSAC will conduct a pre-bid meeting to address any clarifications of the organisations interested in responding to the Tender, which will take place at the following venue and time:

Venue – Conference Hall, Odisha Space Applications Centre, Jayadev Vihar, Bhubaneswar-751023



Time - 11.00 A M

Date - 05.01.2023

The prospective bidders are requested to attend the pre-bid meeting on scheduled date and time. Methodologies, scopes of the Project and Terms and Conditions shall be open for discussion for wider competition and competitive prices.

The bidders are requested to submit all their questions mentioning the reference of the paragraph (Paragraph No./ Page No.) in advance only in writing/ email to reach the above office not later than 1 working day(s) before the Pre-Bid conference. Any modification of the tender document, which may become necessary as a result of the Pre-Bid conference, shall be issue as an Addendum/ Corrigendum and communicated to the Vendors through email and post.

16. Submission of wrong information

The Chief Executive (CE), ORSAC will disqualify any bidder at any stage of bid evaluation if it is discovered that the bidder has made wrong claims regarding its fulfilment of the eligibility criteria and CE, ORSAC will forfeit the EMD and may blacklist and initiate a legal action.

In the event of contract being awarded to such a firm making false claims/suppression of truth/misleading claim/wrong claim regarding its fulfilment of the eligibility criteria, the CE, ORSAC shall immediately terminate the contract and forfeit the Performance Bank Guarantee submitted by the company including black listing and legal action which shall be deemed fit will be initiated against him.

17. Validity of proposal

Quoted rates must be valid for a period of 180 days from the date of the opening of the financial bids of tender. The overall offer for the assignment and bidder quoted price shall remain unchanged during the period of validity. In case the bidder withdraws his offer during the validity period, bid will be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof.

18. Tender Evaluation

All bids and all supporting documents / documentary evidence would be evaluated by a Tender Evaluation Committee (TEC) constituted by the CE, ORSAC to determine whether the bids received are complete in all respects as specified in the tender document. The decision of the Tender Evaluation Committee in the evaluation of responses to the Tender shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.

The evaluation of the techno commercial bid shall be done in two stages as:

a) Sub - Stage - A (Essential pre-qualification criteria)

- i) All the bids would be examined to determine that these qualify against the essential pre-qualification criteria, whether bidder has submitted the EMD & Tender fee with the technical



bid, whether all the documents as mentioned / or required in the tender document to be submitted with the technical bid, has submitted or not, whether all the documents are in the prescribed format and has been properly **signed & stamped** and whether the bids are completed and generally in order.

ii) The bids of the tender(s) that will not qualify Sub-stage – A shall be rejected.

b) Sub – Stage – B (Technical Competence Verification)

- ✓ The TEC will examine the detailed technical details like Geospatial Work carried out by the Firm and specifically Survey & Re-Survey work, if done by Vendor in past, whether all the work orders submitted by the Vendor against the work experience is complying the requirements as mentioned in the tender.
- ✓ The bid which is not complying with the tender specification will be rejected.
- ✓ After evaluation of the techno commercial bid(s), a list of the bidder(s) who qualify the techno commercial evaluation (Sub – Stage – A & B).
- ✓ The short-listed Vendors will have to give technical Presentations on understanding of the methodology given in the Tender before the TEC and will also present a detail proposed work plan that will be followed by the Vendor demonstrating execution of the Project for a small part of the area to be provided by the Technical Committee. The practical demonstration will be done by the short-listed vendors using their own laptop and own software, only the demonstrative data input is to be provided and 15 minutes will be allotted for the demonstrative job. Each Vendor will be allotted 15 minutes time for the presentation. TEC will evaluate the presentation and demonstrative work and will award marks out of 100 total marks. The Vendors scoring more than and equal to 70 % will be selected for the next stage financial opening of their bids. A list of qualified Vendors will be published by Chief Executive, ORSAC. The marking system criteria is given at Form-IX.

c) Stage – II (Financial Evaluation)

The financial bid(s) of the only technically qualified and evaluated bidder(s) scoring more than and equal to 70% marks will be opened for financial evaluation. The price bids shall be opened only for the Technically Qualified Bidders. The date, time and venue of the opening of price bids shall be communicated to the Technically Qualified Bidders in advance. The authorized representatives of the Technically Qualified Bidders may be present during the price bid opening process. The price bids shall be scrutinized for their conformity to the specified formats and signatures. The price bids not in specified format and/or not with signature of the authorized representatives shall be summarily rejected.

Scrutiny and evaluation of the price bids shall be conducted as follows.



In the event of difference between the price mentioned in figures and words, the price in words shall be considered valid and binding. The evaluation of the price bids will be based on the combined **Quality and Cost Based Selection (QCBS) Method with a Mini-Max Unit Price Criteria.**

Scrutiny and evaluation of the Financial Bids shall be carried out as per the following guidelines.

- i) Estimated quoted price for surveying one Square Kilometre using DGPS/ETS survey of cadastral polygons and generating all required map outputs as per the scope of work of this tender is fixed at Rs.45,000/- (Rupees Forty-five Thousand) only, without any taxes or levies.
- ii) Thus, no vendor can quote price more than 10% of the estimated price or less than 20% of the estimated price.
- iii) If any vendor quotes a price less than 20% of the estimated cost, the firm must submit an equivalent Bank Guarantee, in addition to the EMD of the tender from a Nationalised bank having its branch at Bhubaneswar, of the differential amount below 80% of the estimated price. This BG will be placed / kept inside the financial bid cover, in order to be considered when the bid is below 80% of the estimated price. Any price quoted less than 80% without accompanying the appropriate BG, shall be summarily rejected.
- iv) In the event of difference between the price mentioned in figures and words, the price in words shall be valid and binding.
- v) Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its tender will be rejected.
- vi) Totalling of the itemized price quoted will be done if not carried out. Total price will be treated as bid price.
- vii) Any discrepancy relating to prices quoted in the offer across different sections of the bid, only prices given in the prescribed format of this RFP shall prevail.
- viii) No conditional bids are permitted.

Scores of the Commercial Evaluation would be weighed prorata on a scale of 100. The Bidder with the lowest commercial quote shall be awarded 100 marks. The marks obtained by the bidders in the Financial Bid evaluation shall be considered as Financial Score (FS). The Financial Score of the other Technically Qualified Bidders shall be computed as per the following formula.



Any of the Commercial bids mentioned in the CF-2: FORMAT FOR FINANCIAL BID will be considered for the evaluation Purpose following the below formula.

$$\text{Financial Score (FS)} = 100 \times (\text{Fmin} / \text{Fb})$$

Where:

FS = Financial Score for the bidder under consideration

Fmin = Minimum price quoted by any bidder

Fb = Price quoted by the bidder.

The Technical Score (TS) and the Financial Score (FS) secured by each bidder shall be subjected to the Technical Weightage WT = 0.65 (the weight given to the technical proposal) and Financial Weightage WF = 0.35 (the weight given to the financial proposal).

The **Combined Technical and Financial Score (S)** for the bidder (s) shall be computed as per the following formula.

$$S = (\text{TS} \times 0.70) + (\text{FS} \times 0.30)$$

Tie Breaking strategy to be adopted, in case of a tie in the combined Technical and Financial Scores as under:

The bidder who has executed maximum numbers of open source-based Web RS-GIS Projects and which are live and verifiable, shall be the winner of the bid in the tie, and shall be chosen for the work.

19. Contacting the Client:

19.1. Contact by Writing

No Bidder shall contact the Client on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the Bidder wishes to bring additional information to the notice of the Client, it should be done in writing.

20. Rejection of Bid

Any effort by a Bidder to influence the Client in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

21. Award of Contract

After the due evaluation of financial bid(s), the CE, ORSAC will award the contract to the Vendor scoring the highest mark in the QCBS Methodology. CE, ORSAC may award the work more than one



Tenderer on the Price determined through QCBS Methodology, if agreed by the participating Vendors considering the capability with respect to Man and machine possessed by the Vendors.

21.1 Client's right to accept any Bid and to reject any Bid or all Bids

The Client reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time before the contract award, without thereby incurring any liability to the affected Bidder or Bidder.

21.2 Notification of Award

Before the expiry of the period of validity of the proposal, the Client shall notify the successful Bidder / Bidders on website, in writing by registered letter or by fax, that its bid has been accepted. The work will be distributed to more than one Bidder against the zones (East, West, North and South) to complete the Project within a time period of six months and no Bidder will be allotted more than two Zones. The cost determined at the QCBS is final and the interested Bidders want to work have to agree with that unit rate selected through QCBS Tender. The Bidder/ Bidders shall acknowledge in writing the receipt of the notification of award and will send his acceptance within 3 days to enter into agreement within next fifteen (15) days.

22. Signing of agreement

Within 15 days of acceptance of award of work, the successful bidder shall deposit Performance Bank Guarantee and sign an agreement in a non-judicial stamp paper costing Rs.100.00 with CE, ORSAC for due performance of the awarded work in accordance with the terms and conditions of the Tender. Failure to sign the agreement shall entail cancellation of award of work and forfeiture of bid security.

23. Performance Security

On receipt of the purchase order, the successful bidder has to submit the Performance security in shape of Bank Guarantee for an amount equal to 10% of the contract value from a scheduled Bank invocable at Cuttack valid until completion of work subject to extension from time before expiry of the B.G as decided by CE, ORSAC.

24. Discharge of Bid Security

On receipt of the performance guarantee from the successful bidder, CE, ORSAC shall discharge the bid security of all Bidders. Here after the successful bidder will be known as '**Vendor**'.

25. Expenses for the Contract

The incidental expenses of execution of agreement / contract shall be borne by the successful bidder.

26. Failure to abide by the Agreement

The conditions stipulated in the agreement shall be strictly adhered to and violation of any of these conditions will entail termination of the contract without prejudice to the rights of the CE, ORSAC with such penalties as specified in the Bidding document and the agreement.

27. Delivery & Compliance:



The schedule delivery of products as agreed by the Vendor under the Project followed by a time schedule shall be delivered after due QA & QC from ORSAC otherwise the order will be automatically stand cancelled and the performance security will be forfeited.

28. No Claim Certificate

The Vendor shall not, be entitled to make any claim, whatsoever, against the Client under or by virtue of or arising out of this contract nor shall the Client entertain or consider any such claim after Bidder shall have signed a "no claim" certificate in favour of the Client in such forms as shall be required by the Client after the works are finally accepted.

29. Suspension

The Client may, by a written notice, suspend all payments to the Vendor under the contract, if the Vendor fails to perform any of its obligations under this contract, (including the carrying out of the services) provided that such notice of suspension:

- Shall specify the nature of the failure and
- Shall request the Vendor to remedy such failure within a specified period from the date of issue of such notice of suspension.

30. Annulment of Award

Failure of the Vendor to comply with the requirement shall constitute sufficient ground for the annulment of the award and forfeiture of the PBG, in which event the Client may make the award to the next lowest evaluated Bidder or call for new bids.

31. Data Security

The vendor shall ensure that none of its representative or employee will enter the secured area with any digital storage device without any authorization from competent authority nor they copy and take away any data from the secured area.

32. Human Resource, Organization and Staffing

The Bidder would fulfil all statutory obligations towards his employees like payment of PF, ESI etc. (Proof is to be attached with the Technical Bid).

The Bidder's proposals must include an organization chart reflecting the Bidder's overall business structure with an explanation of the team. A comprehensive staffing plan must outline Bidder's staff responsibilities necessary to survey/resurvey work. However, for all purposes (operational, administrative, implementation and reporting etc.) the primary bidder will be solely responsible to the Department.

The Bidder will be required to identify two project team members including one Project Manager. These two proposed resources will be part of the team making presentation during the technical evaluation stage and the same Project Manager will be the 100% dedicated resource for the complete period of the project. The team members may be interviewed during presentation.



The project manager will be finalized on submission of his/her CV to CE, ORSAC based on his/her qualification, expertise and experience. The Project Manager shall have to liaise with the Nodal Officer designated by CE, ORSAC for this project.

The qualification and skill level of the man-power deployed for the work shall be verified by ORSAC. The persons to be deployed by the firm should meet the minimum qualification and experience as follows:

Sl. No	<u>Nature of work</u>	<u>Qualification Requirements of Professionals to be Engaged</u>
1	HRSI Processing, Analysis, Interpretation, Registration of HRSI on Revenue cadastral, Image Derived Raster & Vector DB Creation, and Quality checking of Image derived GIS outputs.	B.Tech. or MCA with minimum 3 years' experience in photogrammetry, Remote Sensing & GIS Industry production environment.
2	Cadastral Plot Boundary interpretation and Gharbari area demarcation	Diploma in Engg. with at least one year or H.Sc. with ITI (Draftsman) with at least 2 years or H.Sc. with at least 3 years' experience in map digitization in AutoCAD/GIS in GIS industry production environment
3	Auto CAD operation	H.Sc. with ITI (Draftsman) with at least 2 years or H.Sc. with at least 3 years' experience in map digitization in AutoCAD/GIS, in GIS industry production environment.
4	GIS and MIS Statistics Generation	B.Tech or MCA with minimum 3 years of GIS Industry experience in GIS & MIS Database Creation , Programming and Management.
5	DGPS/ETS survey (Supervision/Data Collection/ Post processing)	Degree/ Diploma in Engg. with at least 1-year experience in DGPS/ETS survey
6	DGPS/ETS survey (Field observation/Data Collection)	H. Sc. with 1-year experience in DGPS and ETS survey



Sl. No	<u>Nature of work</u>	<u>Qualification Requirements of Professionals to be Engaged</u>
7	Building Open-Sourced based Web-GIS of Unsurveyed Land information System.	B.Tech or MCA with minimum 5 years industrial production experience in Design , Creation , Customization of Open Source Based Web-GIS Projects.
8	Geo-ICT Project Manager or Project In-charge	B.Tech or MCA with minimum 7 years industrial production experience in managing large scale RS-GIS and Geo-ICT Projects of Govt Sector.

The Bidder will be required to put a dedicated team of professionals as above for the various phases of the project.

33. Right to Refuse Personnel

At its sole discretion, CE, ORSAC reserves the right to refuse any personnel, of the Bidder/company/consortium, for use in the performance of a contract pursuant to this Tender.

34. Audit

The CE, ORSAC can at any time during the project execution of the various phases initiate a “**Project Audit**” by Departmental Auditor or by independent Auditor. The Bidder will be required to facilitate the audit process and provide all data/information, documents/proofs, reports and access to premises, systems, and employees for a comprehensive and smooth audit process.

35. Penalty

CE, ORSAC may impose penalty for delay in the execution of the project. Execution of Project Work shall be done by the Bidder in accordance with the time schedule as agreed and finalized in the Work Contract/Agreement. A delay by the Bidder in the performance of its Contract obligations shall render the Bidder liable to any or all the following sanctions at the discretion of the CE, ORSAC.

- a. Forfeiture of performance guarantee
- b. Imposition of liquidated damages,
- c. and/or Termination of the Contract for default

If at any time during performance of the contract, the Bidder should encounter conditions impeding timely completion of the services under the Contract and performance of services, the Bidder shall promptly inform the CE, ORSAC in writing of the fact of the delay, its likely duration and its causes. As soon as practicable after receipt of the Bidder’s notice, the CE, ORSAC shall evaluate the situation and may at its discretion extend the Bidder’s time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.



36. Confidentiality

The Vendor and their personnel shall not, either during the term or after expiration of this contract, disclose any proprietary or confidential information relating to the services, contract or the Client's business or operations without the prior written consent of the Client.

37. Confidentiality of Records

Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and central law by the Bidder. All material and information, regardless of form, medium or method of communication, provided to the Bidder by the CE, ORSAC, or acquired by the Bidder on behalf of the State shall be regarded as confidential information in accordance with the provisions of applicable state and central law, state regulations, departmental policy, and ethical standards. Such confidential information shall not be disclosed, and all necessary steps shall be taken by the Bidder to safeguard the confidentiality of such material or information in conformance with applicable state and central law, state and central rules and regulations, departmental policy, and ethical standards.

38. Termination of Contract

38.1 Termination for Default

The Client may, without prejudice, to any other remedy for breach of contract, by written notice of default sent to the Vendor, terminate the contract in whole or in part if:

The Vendor fails to deliver any or all of the obligations within the time period(s) specified in the contract, of any extension thereof granted by the Client and/or fails to perform any other obligation(s) under the contract.

38.2 The Vendor will also be liable for any loss suffered by the CE, ORSAC because of his negligence.

38.3 Upon termination of this agreement, the parties will comply with the Exit Management Schedule. However, the disputes, if any, may be referred to Arbitration.

38.4 Termination for Insolvency, Dissolution etc

The Client may at any time terminate the contract by giving written notice to the Vendor without compensation to the Vendor, if the successful

Bidder becomes bankrupt or otherwise insolvent or in case of dissolution of firm or winding up of company, provided that such termination will not prejudice or effect any right of action or remedy which has accrued thereafter to the Client.

38.5 Termination for Convenience

The Client reserves the right to terminate by prior written notice, the whole or part of the contract. The notice of termination shall specify that termination be for Client's convenience, the extent to which performance of work under the contract is terminated and the date on which such termination becomes effective.



39. Sub- Contracting

Subcontracting of project will not be permissible in any form. If awarded a contract pursuant to this RFP, the selected Bidder shall be responsible for completion of project. Subcontracting of the project will lead to termination of contract and forfeiture of Performance Guarantee.

40. Ownership of Work Products

The CE, ORSAC shall have all ownership right, title, and interest, including ownership of copyright, in all work products thereof and associated documentation, created, designed, and/or developed solely for the CE, ORSAC under this Contract (known collectively as "Work Products"). The State of Odisha shall have royalty-free, non-exclusive, and un rights to use, disclose, reproduce, and/or publish, for any purpose whatsoever, all said Work Products. The Bidder shall furnish the Work Products upon request of the CE, ORSAC, in accordance with the Contract and applicable State Rules, Act and Manuals.

41. Exit Management Schedule

41.1 Purpose

This schedule sets out the provisions which apply on expiry or termination of Work Contract/Agreement, the Project Implementation, Operation and Management SLA (Service Level Agreement) and Statement of Works. In the case of termination of the Work Contract /Agreement, Project implementation and/or Operation and Management SLA or SOWs (Statement of Works) due to illegality, the parties shall agree at that time whether, and if so during what period, the provision of schedule shall apply.

41.2 Cooperation and provision of information

During the exit management period: The Bidder will allow CE, ORSAC , or the Replacement Bidder access to information reasonably required to define the then current mode of operation associated with the provision of the services promptly on reasonable request by CE, ORSAC , or the Replacement Bidder, the selected Bidder shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with the Service Agreement, the Project Implementation, the Operation and Management SLA and SOWs relating to any material aspect of the services provided by the Bidder. CE, ORSAC, or the Replacement Bidder shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The Bidder shall permit CE, ORSAC, and/or the Replacement Bidder to have reasonable access to its employees and facilities as reasonably required by CE, ORSAC, or the Replacement Bidder to understand the methods of delivery of the services employed by the Bidder and to assist appropriate knowledge transfer.

41.3 Confidential Information, Security and Data

The vendor will promptly on the commencement of the exit management period supply to CE, ORSAC, and/or the Replacement Bidder the following:



Information relating to the current services rendered and performance data relating to performance in relation to the services; and Documentation relating to the Survey/Resurvey project, Government of Odisha Intellectual Property Rights; and

All other information (including but not to documents, records and agreements) relating to the services reasonably necessary to enable CE, ORSAC, or its Replacement Bidder to carry out due diligence in order to transition the provision of the services to CE, ORSAC, or its Replacement Bidder (as the case may be).

41.4 Employees

Promptly on reasonable request at any time during the exit management period, the vendor shall, subject to applicable laws, provide to CE, ORSAC, a list of all employees (with job titles) of the Bidder dedicated to providing the services at the commencement of the exit management period;

41.5 General Obligation of the Bidder

The vendor shall provide all such information as may reasonably be necessary to effect as seamless a handover as practicable in the circumstances to CE, ORSAC, or its Replacement Bidder and which the Bidder has in its possession or control at any time during the exit management period.

For the purposes of this Schedule, anything in the possession or control of any vendor/associated person is deemed to be in the possession or control of the vendor. The vendor shall commit adequate resources to comply with its obligations under this Exit Management Schedule.

41.6 Exit Management Plan

The Vendor shall provide CE, ORSAC, with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the Service Agreement as a whole and in relation to the Project Execution SLA.

A detailed programme of the transfer process that could be used in conjunction with a Replacement Bidder including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer; and plans for the communication with such of the Vendor's staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on CE, ORSAC, operations as a result of undertaking the transfer; and (if applicable) proposed arrangements for the segregation of the Vendor's networks from the networks employed by CE, ORSAC, or the Replacement Bidder and identification of specific security tasks necessary at termination; and

Plans for provision of contingent support to CE, ORSAC, and/or the Replacement Bidder for a reasonable period after transfer for the purposes of providing service for replacing the Services.

Each Exit Management Plan shall be presented by the Vendor to CE, ORSAC and approved by CE, ORSAC and its nominated agencies.

During the exit management period, the Vendor shall deliver the Services in a peaceful manner.



Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

This Exit Management plan shall be furnished in writing to (CE, ORSAC) within 60 days from the Effective Date of this signing of the Work Contract/Agreement.

42. Force Majeure

42.1 Notwithstanding the provisions of the tender, the Vendor shall not be liable for forfeiture of its performance guarantee, liquidated damages or termination for default, if and to the extent that, it's delays in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

42.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Vendor and not involving the Vendor and not involving the Vendor's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Client either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes or any other unforeseen circumstances.

43. Arbitration and Jurisdiction

- 43.1.** If, any dispute arises between the Parties hereto during the subsistence or thereafter, in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Agreement or regarding a question, including the questions as to whether the termination of this Agreement by one Party hereto has been legitimate, both Parties hereto shall endeavour to settle such dispute amicably. The attempt to bring about an amicable settlement is considered to have failed as soon as one of the Parties hereto, after reasonable attempts [which attempt shall continue for not less than 30(thirty) days], give 15 days' notice thereof to the other party in writing.
- 43.2.** In the case of such failure, the dispute shall be referred to a sole arbitrator who would be the Principal Secretary, Department of Revenue and Land Reforms, Govt. of Odisha.
- 43.3.** It will be the parties' and arbitrator/s endeavour to finalize proceedings within 60 days.
- 43.4.** The place of arbitration shall be Bhubaneswar.
- 43.5.** The Arbitration proceeding shall be governed by the Arbitration & Conciliation Act, 1996.
- 43.6.** The proceedings of arbitration shall be in English language.
- 43.7.** The arbitrator's award shall be substantiated in writing. The court of arbitration shall also decide on the costs of the arbitration procedure.
- 43.8.** The parties hereto shall submit to the arbitrator's award and the award shall be enforceable in any competent court of law.
- 43.9.** The Department may terminate this Contract, by giving a written notice of termination of minimum 30 days, to the Vendor if the Vendor fails to comply with any decision reached consequent upon arbitration proceedings.



41.10 The contract shall be interpreted in accordance with the Indian law/Contract Act.

42. Liquidated Damages

In the event of the failure of the Vendor to secure acceptance of the services by the Client within 90 days after completion of contract, the Client reserves the option to recover from the Vendor as liquidated damages and not by way of penalty for the period after the said 90 days, until acceptance a sum equivalent to 2% (two percent) of the contract value for each month of the failure of Vendor up to a maximum deduction of 10%, to secure acceptance or part thereof without prejudice to the client's other remedies under the contract. Provided no such deduction shall be made if the delay is on account of the Client.

43. Blacklisting the Vendor.

Vendor will be blacklisted on any of the following grounds by a written notice to this effect:

43.1. If client or any Government Department or District administration who are involved in this project complains with reasonable proof that the Vendor is resorting to malpractices or the services rendered by Vendor are of poor quality or inappropriate as per the T & C of the Project or the deliverables are inadequate or inappropriately delayed.

43.2. In case the Vendor is to be black listed, the Department will have to terminate contract. After termination the Vendor and client will follow the Exit Management Schedule and Plan and subsequently the Vendor will be black listed.

44. No Claim Certificate

The Vendor shall not, be entitled to make any claim, whatsoever, against the Client under or by virtue of or arising out of this contract nor shall the Client entertain or consider any such claim after Vendor shall have signed a "no claim" certificate in favour of the Client in such forms as shall be required by the Client after the works are finally accepted.

45. Warranty:

The bidder shall give a warranty of one year of the maps/layers and ROR generated under the Project from the date of last delivery of the complete Project. During the warranty period, if any mistakes or shortfall noticed by the Revenue Officials at CE, ORSAC /ORSAC/Tahasil level, same shall be corrected without any extra cost. The bidder has to strictly obey and abide with the declarations/ clauses made available in Form no-VII within this warranty.

46. Payment Terms

The payment shall be made as per the actual survey area (Per Sq. Km.) generated by the vendor following the below criteria subject to completion and submission of minimum one village following the methodology as given in the Tender and SOP of R & DM, Department, Govt. of Odisha. The payment mile stones are given below.



Sl. No	Deliverables Milestones / Schedules	Payments %
1	Generation of preliminary draft cadastral map/layer from ortho-image and ground-truthing by DGPS/ETS and submission at Tahasil for 7(3) 2& 9 (4) verification.	25
2	Generation of Preliminary ROR, Map/Layer and LPM and submission after 9 (4) verification to Tahasildar	25
3	Generation of Draft cadastral map/Layer and ROR as per procedure stipulated in Odisha Special Survey & Settlement Rules	20
4	Submission of final map/Layer and ROR	20
5	In corporation of Unsurveyed Land Cadastral Land Information System on a Web-GIS in the servers of ORSAC / SDC.	10

25. Disclaimer

The information contained in this Tender document or subsequently provided to Bidder(s), whether verbally or in written form by or on behalf of CE, ORSAC, Government of Odisha or any of their employees or advisors, shall be subject to the terms and conditions set out in this tender document and any other terms and conditions subject to which such information is provided.

This tender document does not purport to contain all the information each Bidder may require. This tender document may not be appropriate for all persons, and it is not possible for CE, ORSAC, their employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this tender document. Certain Bidders may have a better knowledge of the proposed Project than others. Each Bidder should conduct its own study and analysis and should check the accuracy, reliability and completeness of the information in this tender document and obtain independent advice from appropriate sources. CE, ORSAC, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the tender document. CE, ORSAC may, at its discretion, but without being under any obligation to do so, update, amend, add to any or all of the provisions or supplement the information of this tender document or cancel the present Invitation and call for fresh Invitations.

CE, ORSAC reserves the right to reject any or all of bids submitted in response to this tender notice, invitation at any stage without assigning any reasons whatsoever. The CE, ORSAC also reserves the right to hold, or withdraw from, or cancel the process at any stage up to the final selection.



Neither CE, ORSAC nor their employees or consultants will have any liability in case of non-receipt of any correspondence from them to the bidders due to postal delays. Subject to any law to the contrary, and to the maximum extent permitted by law, CE, ORSAC and its officers, employees, contractors, agents, and advisers disclaim all liability from any loss or damage (whether foreseeable or not), suffered by any person acting on, or refraining from acting because of any information including forecasts, statements, estimates, or projections contained in this document, or conduct ancillary to it, whether or not the loss or damage arises in connection with any negligence, omission, default, lack of care or misrepresentation on the part of CE, ORSAC or any of its officers, employees, contractors, agents, or advisers.



Form-I
Executive Summary
On Company Letterhead

Sl.	Particulars	Information	Evidence at Page
A Organization Profile			
1.	Name of the Firm/ Selected Vendor / Vendors		
2.	Year of Incorporation		
3.	Type of Organization (Public Ltd./ Pvt. Ltd.)		
4.	Nature of Business		
5.	Registered Office Location		
6.	Cities having official Setup		
7.	Official Setup at Bhubaneswar (To be Inspected by TEC, if required)		
8.	Service Tax Registration No.		
9.	No. of Geospatial Technical personnel continuing in Payroll of firm/ selected Vendor / Vendors at least in the last one year		
10.	PAN		
11.	Sales Tax / GST Registration Number		
12.	TAN		
13.	TIN		
14.	Please mention List of Geospatial Software used by the Firm (Open Source / COTS Product)		
15.	Please mention similar type of Projects carried out by the Firm in any part of the Country. Provide the list of the Projects.		
B Financial Information			
14.	Total Turnover in _____ Financial Year		
15.	Total Turnover in _____ Financial Year		
16.	No. of Works of similar nature executed minimum value 2 crores in financial year _____ and _____		
17.	No. of Govt. Organizations/ PSUs where similar kind of work has been executed within last five financial year		
C Details of Demand Draft			



18.	Tender Cost	DD No.- Date- Amount- Drawn on-	
19.	Earnest Money Deposit	DD No.- Date- Amount- Drawn on-	

(Signature of Authorized Signatory)
(Name, Title and Address of the Bidder)
Company seal & stamp



Form II: Covering Letter from the Bidder

(On Company Letterhead)

[Location & Date]

To

**The Chief Executive,
Odisha Space Applications Centre (ORSAC),
Bhubaneswar, Odisha.**

Sub. Bid submission for “Selection of Selected Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed villages of the State of Odisha using High-resolution Satellite Image, digitised old cadastral maps / layers and field survey using DGPS/ETS”

Ref. _____

Sir,

Being duly authorized to represent and act (to be supported by a Power of Attorney document) on behalf of (hereinafter referred to as "the Bidder") and having reviewed and fully understood all of the qualification requirements, scopes and methodology provided in the Tender, undersigned hereby submit the Bid for “Selection of Selected Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed villages of the State of Odisha using High-resolution Satellite Image, digitised old cadastral maps / layers and field survey” as set forth in your Bid-Documents.

I/ We are enclosing our Bid Proposal, with the details as per the requirements of the Bid Document, for your evaluation. The undersigned hereby also declares that the statements made and the information provided in the Bid Proposal is complete, true and correct in every detail. We understand you are not bound to accept any Proposal you receive.

	Primary Contact	Secondary Contact
Name		
Title		
Phone		
Mobile		
Email		
Fax		



I/ We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered to Director, Land Records and Survey Odisha, Cuttack 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 Director, Land Records and Survey Odisha, Cuttack in its tender process.

Prices and Validity:

The prices of the _____ stated in the bid are FIRM during the entire period of job irrespective of date of completion and not subject to any price adjustment as per in line with the Bidding Documents. All prices and other terms and conditions of this proposal are valid for a period of 180 (one hundred eighty) days from the date of opening of the financial bids. We further declare that prices stated in our proposal are in accordance with your bidding.

We confirm that our bid prices include all other taxes and duties and levies applicable on delivery of products as per the Tender notice and confirm that any such taxes, duties and levies additionally payable shall be to our account.

Tender Fee:

We have enclosed the Tender Fee in the form of DD bearing DD No. Dated for a sum of Rs. 1,000/- (Rupees one thousand only).

Earnest Money Deposit:

We have enclosed the Earnest Money Deposit in the form of DD bearing DD No. Dated for a sum Rs. 3,00,000/- (Rupees Three lakhs) only

Deviations:

We declare that job shall be executed strictly in accordance with the methodology and scopes irrespective of whatever has been stated to the contrary anywhere else in our proposal. Further, we agree that additional conditions, deviations, if any, found in the proposal documents other than those stated in our Deviation Schedules, save that pertaining to any rebates offered, shall not be given effect to.

Work schedule:

If this proposal is accepted by you, we agree to provide deliverables and complete the entire work, in accordance with schedule indicated in the proposal, we fully understand that the work completion schedule stipulated in the proposal is the essence of the Job, if awarded.

Job performance guarantee:



We further agree that if our proposal is accepted, we shall provide a Performance Bank Guarantee of value, equivalent to ten percent (10%) of the Job Price as stipulated in Bid document in the form of Bank Guarantee in your favour, which shall be invoked at Bhubaneswar and shall be valid for the Project Period from the date of work order and PBG will be issued within 15 days from the date of receiving of the work order.

I/ We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process or unduly favours our company in the selection process, we are liable to be dismissed from the selection process or termination of the contract at any point of time or during the project/ (or/ and) penalized as per the decision of Chief Executive, ORSAC, Bhubaneswar.

I/ We agree to abide by the conditions set forth in your bid document. It is hereby confirmed that, I/We are entitled to act on behalf of our corporation/company/ firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Yours faithfully,

(Signature of Authorized Signatory)
(Name, Title and Address of the Bidder)
Company seal & stamp



Form III: Bidder Details

(On Company Letterhead)

Sl.	Particulars	Information
1.	Name of the Firm/ Selected Vendor / Vendors	
2.	Complete Postal Address	
3.	Contact Information	Phone – Mobile – Email –
4.	Status of Company (Public Ltd. / Pvt. Ltd.)	
5.	Details of Registration of Firm	Authority – Date of incorporation –
6.	Date of Commencement of Business	
7.	Nature of Business	
8.	Service Tax Registration No.	
9.	PAN	
10.	Sales Tax / GST Registration Number	
11.	TAN	
12.	TIN	
13.	Turnover in _____ Financial Year	
14.	Turnover in _____ Financial Year	

(Signature of Authorized Signatory)
(Name, Title and Address of the Bidder)
Company seal & stamp



Form IV: Man, Power details

(On Company Letterhead)

Project Team Details

S.	Name of the Employee	Designation	Qualifications	Total Experience	Expertise/Skill Set
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

(Signature of Authorized Signatory)

(Name, Title and Address of the Bidder)

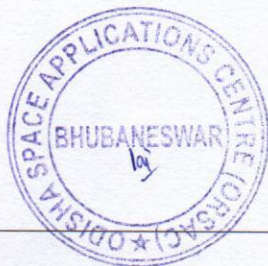
Company seal & stamp

Additional sheet may please be attached, if required.



Form-V: List of DGPS/ETS Possessed by the Firm

Sl No.	No of DGSPS (Base & Rover) possessed by the Firm with the OEM Brand, Make & Model (To be substantiated with the work orders & invoices as the proof of procurement)	No of ETS possessed by the Firm with the OEM Brand, Make & Model (To be substantiated with the work orders & invoices as the proof of procurement)	No of DGPS/ETS to be procured by the Firm, if the Firm is selected as L1 Vendor (Undertaking is to be provided in non-judicial stamp paper costing Rs.100.00)
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Form-VI: List of Geospatial Work carried out by the Firm till date

Sl No	Name of the Geospatial Project taken up by the Firm till date	Name of the Sponsoring Organisation with the complete Official address and name of the contact person name with email Id and mobile contact no	Completion Status (Completed / Ongoing)	Remark
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(Signature of Authorized Signatory)

(Name, Title and Address of the Bidder)

Company seal & stamp



Form VII: Certificate of Guarantee / Warranty

(On Company Letterhead)

I / We certify that,

1. The guarantee / warranty shall be given for a period of one year from the date of satisfactory handing over the delivery of the complete project to the satisfaction of the Tenderer.
2. During the guarantee / warranty period, I / we shall provide the services to correct the deliverables as and when required at the end of Tahasil and ORSAC free of cost. The movement of the *Technical staff and the instruments shall be arranged by us, at our own cost and responsibility.*
3. We undertake that the above guarantee / warranty shall begin only from the date of satisfactory acceptance of the Tenderer at ORSAC Bhubaneswar. The benefit of change in dates of the guarantee / warranty period shall be in the interest of the use / your organization.
4. During the warranty period, we shall provide at-least **4 minimum preventive maintenance visits per year**, if not called by the Tenderer for any services during the warranty period.
5. **Guarantee:** During the guarantee / warranty period, we will be responsible for the deliverables and its acceptance for a period of 365 days.
6. All complaints will be attended by us within 4 working days of receipt of the complaint in our office.
7. We shall try to provide the service to correct the deliverable at Tahasil and ORSAC end. However, in case it is not possible to rectify the error at the Tahasil end, we will do the Job in consultation with ORSAC scientists at ORSAC end and again replace the same at the respective ends.
8. We guarantee that in case we fail to carry out the maintenance work within the stipulated period, CE, ORSAC, Bhubaneswar reserves the right to get the maintenance work carried out at our risk, cost and responsibility after informing us. All the expenses including excess payment for repairs/maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of Performance Bank Guarantee, the same shall be recoverable from us with/without interest in accordance with the circumstances. penalty @ .5% up to 10% on the machine price will be charged for delay of a single extra day from the date of receiving of call log by the office. The call will be booked in the bidder's service call number. No personal number will be entertained for book the call log by the Chief Executive, ORSAC.

Authorized signatory of the company with Seal

Form VIII: Declaration Regarding Blacklisting/Debarring for Taking Part in Tender



(To be executed & attested by Public Notary / Executive Magistrate on ` .10/- non-judicial Stamp paper by the bidder)

I / We hereby declare that the firm / company namely M/s..... has not been blacklisted or debarred in the past by any Union / State Government or organization from taking part in Government tenders in India.

Or

I / We hereby declare that the Firm/company namely M/s. was blacklisted or debarred by Union / State Government or any Organization from taking part in Government tenders for a period of Years w.e.f. to The period is over on and now the firm/company is entitled to take part in Government tenders.

9. In case the above information found false, I/we are fully aware that the tender / contract will be rejected / cancelled by CE, ORSAC Odisha, Cuttack, and EMD / Performance Security Deposit shall be forfeited.

10. In addition to the above CE, ORSAC Odisha, Cuttack will not be responsible to pay the bill for any completed / partially completed work.

DEPONENT

Name _____

Address _____

Attested:

(Public Notary / Executive Magistrate)



Form IX: Mark sheet for Technical Evaluation

Sl. No	Tech Score Evaluation Criteria	Full marks Admissible	Marks Scored as per valid credentials submitted.
1	<p>Average Annual Turnover of the Bidder's Firm / Firms (in case of consortium) in last three years:</p> <p>i. Rs. 10-15 Cr => 5 Marks</p> <p>ii. Rs. 15+ Cr – 20 Cr => 7.5 Marks</p> <p>iii. Rs. 20+ Cr and Above => 10 Marks</p>	10	
2	<p>Average Annual turnover of the Bidder's Firm / Firms (in case of consortium) in last three years, from Geospatial Survey and mapping Business:</p> <p>i. Rs. 5-7.5 Cr => 5 Marks</p> <p>ii. Rs. 7.5+ Cr – 10 Cr => 10 Marks</p> <p>iii. Rs. 10+ Cr and Above =>15 Marks</p>	15	
3	<p>Presence of full-fledged business class office in Odisha dealing with Geospatial Survey and Mapping:</p> <p>i. If Existing since last 5 Years at the time of Bidding => 10 Marks</p> <p>ii. If Not => 0 Marks</p>	10	
4	<p>Numbers of unique Geospatial Survey Mapping Projects of Govt or large corporates executed by the firm with minimum project value of the projects Rs. 0.25 lakhs per project:</p> <p>Marks to be awarded => @ 2 marks per Project.</p>	10	
5	<p>Extent of Area DGPS surveyed and Mapped on Revenue Cadastral in Odisha (in excess of 1000 Ha.)</p> <p>I. @ ∇ 250 Ha. => 2 Marks Or</p> <p>For every extra 250 Ha DGPS Surveyed and Mapped area , excess over 1000 Ha , 2 marks will be awarded.</p>	10	
6	<p>Number of Geospatial Survey and Mapping Professionals under the direct payroll of the Bidder /</p>	10	



Sl. No	Tech Score Evaluation Criteria	Full marks Admissible	Marks Scored as per valid credentials submitted.
	Consortium Bidder at the time of Bidding: I. 20-30 => 2.5 Marks II. 31-50 => 5.0 Marks III. 51-75=> 7.5 Marks IV. Above 75 => 10 Marks		
7	Valid ISO Certifications: I. ISO-9001: 2015 => 2.5 Marks II. ISO-27001: 2013 or ISO/TC211=> 2.5 Marks	5	
8.	Technical Presentation involving: I. Demo of similar projects executed in past II. Understanding of Present work III. Methodology and Innovation to be adopted	30 Marks	
	Total	100	

Note: Minimum Technical Score of 65 is necessary to be eligible for Financial Bid Opening.



Form X: Financial Bid Format

(On Company Letterhead)

We quote below our firm prices for Selection of Selected Vendor / Vendors / Agencies to generate new cadastral maps / layers and Record of Rights (ROR) for un-surveyed villages of the State of Odisha using High-resolution Satellite Image, digitised old cadastral maps / layers and field survey using DGPS/ETS” with required understanding as specified in the tender document.

Sl	Description of work as Per Scope of the Tender	Option for the two Preference Zones	Unit (As per actual surveyed area)	Rate per Unit (Rs.) both in figures and words
1	A. Generation of new cadastral maps / layers and Record of Rights (ROR) for un-surveyed villages of the State of Odisha using High-resolution Satellite Image, digitized old cadastral maps / layers and field survey using DGPS/ETS.		Sq. Km.	Rs. -----.00 (In words)
2	Taxes if any			
	Total (A+B)		Sq. Km.	Rs. -----.00 (In words)

Bid Price In figure Rs.....

Bid Price in Words Rupees.

Bidder's

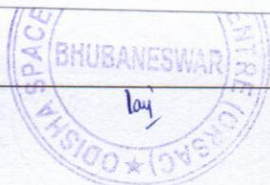
Signature.....

Bidder's

Name.....

Bidder's

Designation.....



Bidder

Company.....

...

Date.....

...

1. All prices quoted are in INR only
2. Prices quoted will be held firm and valid for 180 days from the date of the opening of the financial bid.
3. No change in offered price and model are admissible for any reason whatsoever.
4. The discrepancy between figures and words for Total Cost will be resolved taking the amount in words to be correct.
5. The make and model quoted will be same as mentioned in the Specification compliance form
6. The price quoted is inclusive of all taxes, freight & levies covering Delivery and Final acceptance by CE, ORSAC.

(Signature of Authorized Signatory)

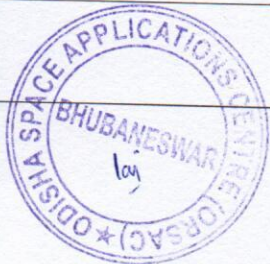
(Name, Title and Address of the Bidder)

Company seal & stamp



Form XI: Checklist of Documents to be submitted

Sl.	Particulars	Supporting Documents to be submitted	Provided (Y/N)
1.	Covering Letter	Form-II	
2.	Executive Summary	Form I	
3.	Bidders Details	Form III	
4.	Manpower Details	Form IV	
5.	Instrument Details	Form-V	
5.	List of Geospatial Work carried out by the Firm till date	Form VI Copies of Work Orders of similar natures along with Client certificates regarding completion of Projects.	
6.	Certificate of Guarantee and warranty	Form VII	
8.	Declaration Regarding Blacklisting/Debarring for Taking Part in Tender.	Form VIII	
9.	Mark sheet for evaluation of Presentation	Form IX	
9.	Financial Bid	Form X	
10.	Incorporation/ Registration of Firm/ Selected Vendor / Vendors	Copy of Certificate of incorporation/ Copy of certificate of registration	
11.	Service Tax/ GST Registration	Copy of Service / GST Tax Registration Certificate	
12.	Meeting minimum average Turnover requirement for FY _____ & _____	Copy of the audited profit and loss account/ balance sheet/ annual report of _____ & _____.	
13.	Power of attorney	Power of attorney by the CEO or competent authority or board	



		resolution authorizing the Bidder to sign/ execute the proposal as a binding document and also execute all relevant agreements forming part of	
14.	The bidder firm /selected Vendor / Vendors should have made a payment of Rs. _____ (Rupees _____ only) for the tender Document (Tender Cost)	DD for Rs. _____ /- must be furnished.	
15.	The bidder firm /selected Vendor / Vendors should have made a payment of Rs. _____ (Rupees _____ only) for the EMD	DD for Rs. _____ must be furnished.	

Plane sheet for calculation & space for important notes

Office use only.

1. Mobilization advance
2. Performance security
3. Exit clause

A. K. Mallick
21-12-22
CHIEF EXECUTIVE

_____ **End of Tender** _____

