

**Broadcast Engineering Consultants India
Limited (Under Ministry Of Information
and Broadcasting) C-56A/17, Sector-62,
Noida- 201307**

Tender No. BECIL/PROJ/ITS&AV/Healthcare/2020 Dated: 10-04-2020

Corrigendum / Addendum No. 1

Subject: Corrigendum to Expression of Interest for EMPANELMENT OF AGENCY FOR SUPPLY OF HEALTHCARE EQUIPMENTS

Tender No. BECIL/PROJ/ITS&AV/Healthcare/2020 Dated: 10-04-2020

1. The following items are included in the EOI and their Technical specifications are attached as Appendix to this corrigendum.

a) HAND HELD THERMAL IMAGING SYSTEM

b) OPTICAL THERMAL FEVER SENSING SYSTEM

c) COVID – 19 PATIENT TRACKING TOOL

2. The Pre – Bid queries of all the prospective bidders are attached as Appendix to this corrigendum.

3. The Important Dates of EOI has been amended as follows:

S.No.	Clause / Appendix / Page	Existing Clause	Amended Clause
1	Last Date of Submission	17 April 2020 at 1200 Hrs	20 April 2020 at 1200 Hrs
2	Date of Opening of Proposals	17 April 2020 at 1700 Hrs	20 April 2020 at 1700 Hrs

Note: Other Terms and conditions of the above said EOI will remain same.

s/d

General Manager

HAND HELD THERMAL IMAGING SYSTEM

S.No	Specifications
1	Device shall be non-contact type for temperature measurement of human body and shall act like a fever sensing system.
2	Device shall read temperature of human body from a distance of around 02~05 meters
3	Device shall work 24X7 with an auxiliary power source
4	Device shall support external display
5	Device shall be provided with blackbody setup for real time temperature calibration and correction
6	Detector type: Should be Uncooled FPA Microbolometer
7	Array Size: Min. 160 X 120
8	Pitch size < 25 μ m
9	Spectral Range: 8-14 μ m
10	Sensitivity \leq 0.06 Degree Celsius @ 30 Degree Celsius
11	Detector frequency \geq 50 Hz
12	Sensor: CMOS
13	Resolution: Min. 1.3MP
14	The visual system shall have min. 02 LEDs for active illumination
15	Frame Rate: 50Hz
16	Video Output: PAL / NTSC
IR Lens Data	
17	FOV: 25° X 19°
18	Should have manual focus
19	Minimum Focus Distance \leq 10cm
20	Spatial Resolution \leq 2.72mRad
21	Display shall be Min. 3.5" LCD
22	Display resolution shall be min. 640 X 480
23	Display shall be colored
24	Display shall be touchscreen type
25	Polarity: Min. 11 colored palletes to suit user perception
26	Image Display: Switchable infrared & visual image Image overlay of infrared and visual image
27	Image Adjustment: Auto / Manual adjustment of contrast and brightness Auto Enhancement mode
28	Temperature measurement range of the device shall be +20°C to +50°C
29	Temperature measurement accuracy shall be Minimum 0.3°C
30	Device shall have following features for calibration: Auto mode (with variable selectable time slots) Manual mode
31	Device shall have full screen maximum temperature tracking (hotspot tracking)
32	Device shall have an audio alarm for high temperature. High temperature value shall be adjustable as per user requirement in real time scenario.
33	Device shall have feature to show high temperature part in a specific marked color on the display

34	Device shall have following features for emissivity: Adjustable emissivity from 0.01 to 1.0 (with increment least count of 0.01) Selection from pre-defined material list
35	Device shall have automatic background temperature correction feature.
36	Device shall have following features: Date Adjustment Time Adjustment Temperature unit selection from °C, °F & K Language selection Contrast adjustment Brightness adjustment LCD backlight adjustment IP Address
37	The device shall have micro SD card slot.
38	Memory of the device shall be extendable up to 32GB
39	Device shall store the following: 1.Manual / Automatic Storage Single frame infrared image Infrared and visible image (associated) Infrared and visible overlay image Infrared video Infrared & visible overlay video
40	Thermal image format: JPEG format with raw temperature measurement data
41	Visible image format: H.264
42	Device shall have voice annotation recording feature while capturing image
43	Device shall have text comment feature while capturing image
44	Device shall operate on li-ion rechargeable battery
45	Device shall operate for Minimum 03 hours on single charge of battery
46	Device shall be provided with 02 set of batteries
47	Device shall have auto sleep and auto shutdown feature
48	Device shall be provided with 01 micro SD card reader
49	Device shall have 12V DC power input interface
50	Device shall have video output feature
51	Device shall have in-built microphone
52	Device shall have in-built buzzer
53	The device shall have provision for mounting on tripod
54	Device shall be provided with lens cap, hand strap and sunshade for display
55	Operating temperature: Min. -10°C to +50°C or better
56	Storage temperature: Min. -40°C to +70°C or better
57	Encapsulation Min. IP 54
58	Relative Humidity: 5% to 95% (non-condensing)
59	Shock resistance: Min. 25G
60	Vibration resistance: Min. 2G
61	Drop 2m
62	Weight should be ≤ 1000 grams without battery
63	Temperature of blackbody shall be 37 Degree Celsius
64	Accuracy ≤ 0.2 Degree Celsius
65	Effective radiation plane ≥ 80mm

66	Blackbody shall operate on 220V AC power supply
67	Effective emission of blackbody shall be 0.96
68	OEM should have its own NABL accredited lab facility in India for testing and calibration of optoelectronic equipment.
69	OEM should have its own manufacturing and repair facility in India
70	OEM should have its own NABL accredited lab facility for the following: High Temperature test Low Temperature test Humidity test Drop test To ensure proper testing of each device manufactured by OEM.
71	OEM should have Quality management system certificate standard

ONLINE THERMAL FEVER SENSING SYSTEM

S.No	Specifications
1	System shall be non-contact type for temperature measurement of human body and shall act like a fever sensing system.
2	System shall have both thermal and visual camera in single housing
3	System shall read temperature of human body from a distance of around 03~10 meters
4	System shall work 24X7
5	System shall come alongwith a client software
6	System shall be provided with blackbody setup for real time temperature calibration and correction
7	System shall be able to measure temperature of atleast 30 persons present in the line of sight simultaneously
8	System shall have feature of automatic body surface temperature correction
9	System shall have feature of automatic calibration
10	System shall capture alarm screen automatically
11	Detector type: Should be Uncooled FPA Microbolometer
12	Array Size: Min. 384 X 288
13	Pitch size < 17 μ m
14	Spectral Range: 8-14 μ m
15	Detector frequency \geq 50 Hz
16	Sensor: 1/8" CMOS Progressive Scan Ultra Low Light System
17	Resolution: Min. 1920 X 1080
18	FOV: Horizontal > 32° Vertical > 18°
19	FOV: 40° X 30°
20	Should have fixed focus
21	Minimum Focus Distance \leq 10cm
22	Focal length \geq 9mm
23	Polarity: Min. 09 colored palletes to suit user perception
24	Temperature measurement range of the System shall be +20°C to +50°C
25	Temperature measurement accuracy shall be Minimum 0.3°C
26	Alarm response time shall be maximum 01 Second
27	System shall have 12V DC power input interface
28	Maximum power consumption of the system shall be 15W

29	System shall be IP
30	Network interface: RJ45 (Single connector output for both the cameras)
31	The System shall have provision for mounting on tripod.
32	Operating temperature: Min. -10°C to +50°C or better
33	Storage temperature: Min. -40°C to +60°C or better
34	Encapsulation Min. IP 54
35	Relative Humidity: 5% to 95% (non-condensing)
36	Weight should be ≤ 5Kg
37	Temperature of blackbody shall be 37 Degree Celsius
38	Accuracy ≤ 0.2 Degree Celsius
39	Effective radiation plane ≥ 80mm
40	Blackbody shall operate on 220V AC power supply
41	Effective emission of blackbody shall be 0.96
42	<p>The client software shall have following grids available:</p> <ol style="list-style-type: none"> 1. Live Infrared-channel with temperature readings 2. Live Visual System channel with temperature readings 3. High temperature alarm image from Infrared Channel 4. High temperature alarm image from Visual Channel 5. Live temperature status of human present in line of sight
43	<p>Client software shall have atleast 04 configuration windows:</p> <ol style="list-style-type: none"> 1. Live View 2. Device Manager 3. System Configuration 4. History
44	The application shall have face detection feature for both thermal and visual stream
45	The temperature of the human object shall be marked with them in the video stream.
46	<p>The software shall have feature for adjusting the following parameters of IR sensor:</p> <ol style="list-style-type: none"> 1. Emissivity 2. Distance 3. Humidity 4. Brightness 5. Contrast 6. Adjustment to compensate the difference between body temperature inside body and on the skin to show correct temperatures.
47	The software shall have feature of correcting the deviation in temperature.
48	<p>The software shall have below mentioned features:</p> <ol style="list-style-type: none"> 1. Turning on / off Video recording 2. Turning On / Off image capturing 3. Turning On/Off audio alarm
49	The software shall have feature of network configuration

50	<p>There shall be feature in software to distinguish / configure the following:</p> <ol style="list-style-type: none"> 1. Mild Fever 2. Fever 3. Severe Fever <p>There shall be different alarms for different modes</p>
51	<p>The software shall have following alarm settings:</p> <ol style="list-style-type: none"> 1. Track maximum temperature 2. Show maximum temperature value 3. Audible alarm 4. No Mask alarm
52	<p>The software shall have feature for setting up black body in FOV of the camera for auto calibration and temperature correction.</p>
53	<p>The software shall record both video and image</p>
54	<p>The software shall have feature of masking high temperature radiating sources.</p>
55	<p>A PC is to be provided with minimum 01 month storage of video recording. Archival of every month data will be ensured by buyer.</p>
56	<p>OEM should have its own NABL accredited lab facility in India for testing and calibration of optoelectronic equipment.</p>
57	<p>OEM should have its own manufacturing and repair facility in India</p>
58	<p>OEM should have its own NABL accredited lab facility for the following:</p> <ol style="list-style-type: none"> 1. High Temperature test 2. Low Temperature test 3. Humidity test 4. Drop test <p>To ensure proper testing of each Camera manufactured by OEM.</p>
59	<p>OEM should have Quality management system certificate as per standard</p>

COVID -19 PATIENT TRACKING TOOL

S.No	Specifications
1.	Intelligence investigation platform & tactical tool to detect, prevent and investigate threats to national security using CDR, IPDR, Tower, Mobile Phone Forensics Data.
2.	Should be an advanced analytics and intelligence software that uses Telecom & Internet Data to identify suspect Locations, Associations & Behaviour.
3.	Should Trace contacts & connections of infected persons
4.	Should Identify unknowing contacts with infected persons.
5.	Should be able to Geo locate possible COVID-19 infected persons
6.	Location based Analysis - Easily Geo- Fence an area of interest (eg Meeting place, airport, mosque, railway station, bus stand etc) and identify all the people present at the location at the time of event
7.	Should allow Investigator to identify the how many cell towers from different service providers are covering an incident place or a location on a map.
8.	Should Identify the movement of COVID infected suspects, their cross-border movements, the people they come in contact with etc.
9.	Trace where this person has been and if he or she has been to areas known for being high risk locations.
10.	Should be able to Easily identify close contacts, frequent contacts as well as occasional contacts such as Uber drivers etc.
11.	Should be able to collect information like where the suspect has spent most of his/her time and who all he or she has met. Zero in on connections with Watch List suspects
12.	Should be able to Identify a suspects behaviour, see what he or she does on specific days of the week, where does he or she order food from, where does the suspect go for regular walks, where does he/she work during the day, where does he/she sleep at night etc.

13.	Should be able to Identify All the places the “Infected Person” has visited
14.	Should be able to Identify All the routes he has taken in the same time period.
15.	Determine details of his foreign travel if any
16.	Should Identify All the routes he has taken in the same time period.
17.	Should Identify All the people present with him in a specific location at the same time as him based on Tower & LBS Info using geo fencing
18.	Should Identify Travel services used such as UBER/Ola Share - Buses/Trains/ Flights/Long Distance share cabs/ vehicles booked and travelled
19.	Should Identify Common friends to multiple COVID-19 infected persons
20.	Should support Analysis of following types of telecom logs.
21.	Individual CDRs/Billing Records
22.	2G/3G/4G GPRS CDRs
23.	IMEI Scans
24.	Cell Tower/Mast Dumps
25.	2G/3G/4G GPRS Cell Tower / Mast Dumps
26.	ISD Dumps
27.	Gateway Scans/Dumps
28.	IPDR Data
29.	Should allow user to create Visual Link Charts of Data to identify numbers of interest.
30.	Should compatible with the i2 Analyst Notebook for advanced link Analysis
31.	Should allow user to import data extracted from Mobile Forensic Tools like Cellebrite UFED, Micro-Systemation XRY and HANCOM GMD etc.

32.	Facility to use various base maps like Open Street Maps, Google Maps and Offline Maps without internet including offline satellite imagery.
33.	Must have offline vector base maps of All over India Pre-configured to use directly.

PRE - BID QUERY FOR EMPANELMENT OF AGENCY FOR SUPPLY OF HEALTHCARE EQUIPMENTS

Tender No. BECIL/PROJ/ITS&AV/Healthcare/2020 Dated: 10-04-2020

S.No.	EOI Document Reference(s)(Section& Page Number(s))	Content of EOI require Clarification(s)	Points of Clarification	BECIL's RESPONSE
1	Section 2.1.1 (Scope of the Project)	Bidders / Manufacturer need to submit a compliance certificate from the principal manufacturer that the specification of the offered product is 100% complying with the specification.	Affinique Marketing is an exclusive marketing agency of the manufacturer. Are we eligible to apply for the tender or only the manufacturer can bid for this tender?	Yes, Bidder needs to provide Authorization Certificate from OEM.
2	Section 2.1.1 (Scope of the Project)	Item Description	There are 22 items in the description. Can we bid only for a few of these items instead of all?	Bidder can apply for all or few items as per own discretion and it can provide the standard specification for its item. However, BECIL reserves the right to change the specifications as per end customer's requirement.
3	Section 2.1.1 (Scope of the Project – Note "c")	In addition to this, standard norms provided by concerned health authorities / ICMR for specification will prevail.	Our manufacturer has following certification: <input checked="" type="checkbox"/> ISO Certificate 9001:2015 by International	Bidder can provide their all certification. However, the standard norms provided by concerned health authorities / ICMR for specification will prevail.

			<p>Productivity and Quality Council (IPQC)</p> <p><input type="checkbox"/> CE by International Productivity and Quality Council (IPQC)</p> <p><input type="checkbox"/> ISO 13485:2016 Certification by EUROPACERT</p> <p><input type="checkbox"/> CE by EUROPACERT</p> <p><input type="checkbox"/> ISO 9001:2015 Quality Management System Certification by VRS</p> <p><input type="checkbox"/> Product Tested & Certified by SIMA labs.</p> <p>Are we eligible to bid for the tender?</p>	
4	Section 4.5.2 (Financial strength of the bidder)	Financial year 2016-17, 2017-18, 2018-19	<p>We are registered under Companies Act, 2013 (18 of 2013) since February 2018. We can provide financial statements for the year 2017-18 and 2018 – 2019. The statement for the financial year 2019-2020 is yet to be filed. However, we can provide CA certification for our turnover of the year 2019-20. Are we still eligible to bid for the tender?</p>	Yes, however all the supporting documents needs to be submitted.

5	Tender No. BECIL/PROJ/ITS&AV/Healthcare/2020 Page no. 5	In Page no. 5, Clause 1.2 Point(4) mentioned payment mode - Offline/Online therefore, we would like to submit our bid through Online mode but there is no URL mentioned for Online tender portal. We would request you to kindly give us Online tender URL so, we can register and submit our bid.	Page no. 5, Clause 1.2 Point(4) Payment Mode- Offline/Online	All the Bank Details are given in MANDATE FORM for fee submission. Also, the proposal needs to be submitted Online mode only as zip file, signed & scanned copy on Email address : <u>raman.rana@becil.com</u>
6		We would like to confirm that OEM Authorization is required from all equipment manufacturer.		Yes
7		As per current condition due to Covid-19 lockdown has been extended till 3 rd May, 2020, we would request you to kindly extend bid submission date for 7 days from the lockdown end date.		As it is an Emergency scenario, there is no request to be entertained for extension of EOI submission.
8	Section 2.1.1 (Scope of the Project)	Product requirement	The quantities of each item indicated in the list.	This is an EOI for Empanelment of agencies. However, the quantities of each item will be provided at the time of issuing query/order.
9	Section 2.1.1 (Scope of the Project)	Product requirement No. 19 - Oxygen Plant.	This item has not been covered in APPENDIX TECHNICAL SPECIFICATIONS. Please give the specifications	Bidder can apply for all or few items as per own discretion and it can provide the standard specification for its item. However,

				BECIL reserves the right to change the specifications as per end customer's requirement.
10	Item no. 14 page no. 40	Process single and multiple hotspots tracing and alarm	Should be able to detect temperature of forehead for multiple persons at same time and raise the automatic alarm for high temperature.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
11	Item no. 14 page no. 40	Will be able to measure temperature from 32\$B!n(B to 42.5\$B!n(B with a sensitivity of at least 0.08\$B!n(B	Will be able to measure temperature from 30 \$B!n(B to 50\$B!n(B with a sensitivity of at least 0.1\$B!n(B	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
12	Item no. 14 page no. 40	Operating temperature -10 +50\$B!n(B	Operating environmental (surrounding) temperature range should be -10 to 45\$B!n(B without any need of closed or air condition area.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
13	Item no. 14 page no. 40	Memory for data storage (expandable)	should have minimum memory of 3Tb	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
14	Item no. 14 page no. 40	Battery operated and works on external power supply	With battery backup of 4-6 hours	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
15	Item no. 14 page no. 40	Built in color screen for thermal images 5-8 inch	With Display of at least 22"	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
16	Item no. 14 page no. 40	Able to capture both thermal and digital camera image	Able to capture both thermal (Resolution : 400 \$B!_(B 300) and digital camera image (Resolution : 1920 x 1080)	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
17	Item No-4 page no.38	Quality compliant with standards for surgical N95 respirator: a. NIOSH N95, EN 149 FFP2, or equivalent	Kn-95 standard should also be incorporated.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
18	Item no. 4 Page no. 38	Quality compliant with standards for surgical N95 respirator a. NIOSH N95, EN 149 FFP2, or equivalent	Quality compliant with standards for surgical N95 respirator a. NIOSH N95, EN 149 FFP2, KN-95 or equivalent	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
19	Item no. 14 page no. 40	Process single and multiple hotspots tracing and alarm	Should be able to detect temperature of forehead for multiple persons at same time and raise the automatic alarm for high temperature.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
20	Item no. 14 page no. 40	Will be able to measure temperature from 32°C to 42.5°C with a sensitivity of at least 0.08°C	Will be able to measure temperature from 30 °C to 50°C with a sensitivity of atleast 0.1°C	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
21	Item no. 14 page no. 40	Operating temperature -10 +50°C	Operating environmental (surrounding) temperature range should be -10 to 45°C without any need of closed or air condition area	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
22	Item no. 14 page no. 40	Memory for data storage (expandable)	should have minimum memory of 3Tb	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
23	Item no. 14 page no. 40	Battery operated and works on external power supply	With battery backup of 4-6 hours	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
24	Item no. 14 page no. 40	Built in colour screen for thermal images 5-8 inch	With Display of atleast 22"	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
25	Item no. 14 page no. 40	Able to capture both thermal and digital camera image	Able to capture both thermal (Resolution : 400 × 300) and digital camera image (Resolution : 1920 x 1080)	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
26	----	New Application to be incorporated or to be integrated with existing dashboard and modules	Application with central management dashboard for Contact tracing and log generation with photo authentication of citizen movement and mangement with image processing engine and AI.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
27	3.1. QUALIFICATION CRITERIA - Page no - 16	Business Consortium	Does Consortium is allowed? Apart from Technology, we have Sanitization / Disinfection Chamber companies also. So, if possible we can have a collaboration and share all solutions through a single platform.	Consortium is not applicable. Bidder can apply for all or few items as per own discretion and it can provide the standard specification for its item. However, BECIL reserves the right to change the specifications as per end customer's requirement.
28	Solution Name - Page no - 34	Rescue Team / Personnel Tracking GPS SOLUTION		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
	Solution Objective	Tracking Norms Violation :		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide

				domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		1. Geofencing of Zones	Does it means area geo-fencing or Worker Geo-fencing w.r.t Area where they are working.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		2. Providing a wrist watch/ I-Card/ App with GPS to workers /employees which will track workers of their location during working hours.	Can we use Mobile as a GPS Tracking device which is already using by Arogya Setu App. As this will help to track maximum number of Workers. They just need to install the app.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		Impersonation Control :		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		1. The above wrist watch/ I-Card/ App to be provided with camera that can	This process can be easily done by Mobile using App. We can integrate this feature. Can we use mobile as a	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide

		manually take photograph of the person who is wearing the wrist watch/ I-Card/ App. A system that can store all employees reference pictures which will be used regularly by a designated set of supervisory staff to compare with the photos shot by the workers during working hours (if required), to manually compare the photos to determine if the worker on the field is the same as the one who is employed.	tracking device and geo fencing. This reduce the cost of another device and generally all workers are having smart phones. This is easy to handle and manage from anywhere.	domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		2. AI Based face detection of Employee.	For this we need to store the images of all workers before impeneting AI Based face detection. Can Agency will provide the Workers pics?	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		Calling Facility (Through Wrist Watch/App/I Card)		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.

		10. Dual Sim/Esim/Multiple Operator Connectivity.	Does mobile can be used for this mechanism.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		Playback		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		2. As part of due diligence, the ULB needs to go back to historical data on the movement on particular personnel empyreal provides that feature for the ULB to go back in history to track the movement of any individual personnel.	What is Empyreal means? Is it a predefine App or content used in any app. If yes then gives us a reference.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
29	Page NO - 35	Live Monitoring		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
		Point no 3 & 4	both are same. And need to understand the Empryal terminology	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		Time-bound In-personification with picture		Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
		1. A feature using the camera for the manual picture capture of any ULB personnel wearing the wearable device.	Can we use Mobile & what is ULB?	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
30	Solutions Components - Page No - 35			Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

				complied as per the guidelines issued by various govt. agencies.
		1. Wrist watch/I-Card/App with GPS , GPRS, Camera, speaker/microphone etc as the basic requirements to meet the solution objectives of taking attendance. The watch is charged using the built-in USB port on the watch.	Can we use mobile. This will having all solutions together like, gps, gprs, 4g, charging facilities, ios app, android app, speaker, microphone.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
31	Appendix to EoI – Technical Specifications Page 39 Point 13 - Digital Infrared Thermometer (any make)	Technical Specifications of Digital IR Thermometer	<p>In view of the current scenario and requirement of accurate, non-contact (measurement from a distance atleast a distance of 1-3 meters) equipment with very less response time; the specifications prescribed in the EoI are not relevant.</p> <p>It is suggested that instead of conventional IR Thermometer, technologically advanced Hand Held (Tripod Mountable) Thermal Imaging Systems should be solicited.</p>	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
32	Appendix to EoI – Technical Specifications Page - 40	Technical Specifications of Digital Thermal Scanner - Full Body (with sensing to 3m and beyond)	It is suggested that, in order to manage and monitor temperature at areas of high footfall, Crowd Fever Sensing Systems should be solicited in order to monitor 10-30 people at the same time (Such systems provide	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be

	Point 14 - Digital Thermal Scanner - Full Body (with sensing to 3m and beyond)		<p>temperature of each and every pixel in the entire thermal screen).</p> <p>Further, with the advanced feature of AI (Artificial Intelligence), the systems are capable of Automatic Face Detection (With / Without Masks), Hot Spot Tracking (Categorisation of fever – Normal, Moderate or Critical), Intelligent Report Generation, etc.</p>	<p>complied as per the guidelines issued by various govt. agencies.</p>
33	<p>3. Qualification Criteria & Proposal Evaluation</p> <p>Page - 16</p> <p>3.1.1 Qualification Evaluation Criteria-Financial</p> <p>2. Mandatory Certificates / Undertakings</p>	-NA-	<p>It is suggested that only Indian OEMs having DIPP License for manufacturing of Thermal Equipment with relevant experience and NABL accredited Testing and Calibration Lab, be eligible to qualify for empanelment with BECIL for supply of Thermal Imaging equipment.</p> <p>Considering the criticality of current situation, it becomes mandatory that the downtime of the equipment is minimum and the device can be tested and repaired in India itself.</p>	No change
34	BECIL/PROJ/ITS&AV/Healthcare/2020 pg14 - Section Product Requirement	Product Requirement	<p>Technical specifications and details required for the following items listed in Product requirement</p> <ul style="list-style-type: none"> * Integrated Unified Messaging system * Disaster Management System / Application (with CCC) * IoT based ICT systems * Patient Movement Monitoring 	<p>Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions need to be complied as per the guidelines issued by various govt. agencies.</p>

			<p>system</p> <p>*Assets Movement Monitoring system</p> <p>*Smart ICU</p> <p>the document seems to be truncated post page 40</p>	
36	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	<p>The solution lists requirements for watch/smartphone/app/Smart Id card. If the proposed solution is done only through mobile app, will the solution be permissible</p>	<p>Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.</p>
37	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	<p>If wristwatch/id card , etc is mandatory, then does the bidder require to procure and quote for these elements or BECIL will procure it separately ?</p>	<p>Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.</p>
38	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	<p>Duration for history of the employees movement is required to be maintained ; purging clause</p>	<p>Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.</p>

39	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	There is a mention of Empyreal solutions; does the Rescue Workers system need to integrate with this Empyreal solution	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
40	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	There is mention of prototype to be provided before the final functionality is sanctioned; the wording states that BECIL will provide this , however generally prototypes are delivered by service providers. Just wanted clarity on this	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
41	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	is there a requirement for providing Training on software onsite ? If onsite, then how many locations ?	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
42	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	Is this app required to be integrated into an existing app or this will be a standalone app ?	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.

43	BECIL/PROJ/ITS&AV/Healthcare/2020 pg34- 36 - Section- Rescue Team / Personnel Tracking GPS SOLUTION	Rescue Team / Personnel Tracking GPS SOLUTION	There is a mention of call routing to the rescue emergency services control centre. Is the requirement only to facilitate the call in case of a SOS emergency, or to setup a contact centre along with routing logic, manpower, dialler, etc.	Bidders are required to submit EOI for Empanelment of agencies. Bidders are expected to provide domain specific best solutions. These solutions needs to be complied as per the guidelines issued by various govt. agencies.
44	BECIL/PROJ/ITS&AV/Healthcare/2020 pg 6 - Section- 1.2.2	important Notice to bidders	The bidder must attest the original EOI document with authorized signature and stamp as an acceptance of the EOI terms and conditions and submit the same along with the EOI response. In case of non-compliance, the proposal is liable to be summarily rejected. Is this required to be sent in hard copy given the lockdown sanctions.	The proposal needs to be submitted ONLINE only as zip file, signed & scanned copy on Email address : raman.rana@becil.com
45	BECIL/PROJ/ITS&AV/Healthcare/2020 pg 8 - Section- 1.3.6	Preparation of the Proposal	At the time of submission of proposal, the bidder has to ensure that each page numbered and is duly signed by the bidder or his duly authorized representative. How is this possible ?	The proposal needs to be submitted ONLINE only as zip file, signed & scanned copy on Email address : raman.rana@becil.com
46	BECIL/PROJ/ITS&AV/Healthcare/2020 pg 8 - Section- 1.3.6	Preparation of the Proposal	A compliance statement offering the compliance to various clauses of the EOI should be signed and attached with the proposal. How to sign and attach ?	The proposal needs to be submitted ONLINE only as zip file, signed & scanned copy on Email address : raman.rana@becil.com

47	BECIL/PROJ/ITS&AV/Healthcare/2020 pg 19 - Section- 4.1	Annexures	All annexures require physical sign and company seal which is not feasible due to lockdown, how does one work around this ?	The proposal needs to be submitted ONLINE only as zip file, signed & scanned copy on Email address : <u>raman.rana@becil.com</u>
48	BECIL/PROJ/ITS&AV/Healthcare/2020 pg 5 - Section- 1.2	Tender Mode	Procedure for submitting the EOI online is not clarified, whether it is through online submission or email	The proposal needs to be submitted ONLINE only as zip file, signed & scanned copy on Email address : <u>raman.rana@becil.com</u>