

**Tender document No: IT/02/CCTV/2024/890 dated 07.03.2024**



**TENDER DOCUMENT  
FOR  
Selection of System Integrator for Supply,  
Installation, Commissioning, Testing and  
Warranty of IP based CCTV surveillance  
system with all Accessories**

**(through e-tendering)**

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**THE ODISHASTATECO-OPERATIVE MILK PRODUCERS' FEDERATION LTDD-2,  
SAHID NAGAR, BHUBANESWAR**

**PHONE: 0674 – 2546030/ 2546121/2540417 FAXNO: 0674 – 2540974**

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**E-Procurement notice**

**Tender document No.: IT/02/CCTV/2024/890**

**dated 07.03.2024**

1.	Work name	Selection of System Integrator for Supply, Installation, Commissioning, Testing and Warranty of IP based CCTV surveillance system with all Accessories
2.	Availability of tender documents on the e-tendering portal of Government of Odisha	Date: 07.03.2024 Time: 06:00 P.M
3.	Last date for sending queries to OMFED	Date: 16.03.2024; queries may be sent by email to omfed@yahoo.com
4.	Pre-bid meeting	Date: 19.03.2024; Time: 03:30 P.M; Venue: Virtual mode
5.	Issue of responses to pre-bid queries, addendum/ corrigendum, if required	Date: 22.03.2024
6.	Bid Due Date	Date: 05.04.2024; Time: 05:00 P.M
7.	Paper Cost & EMD shall be submitted in Hard Copy Original on or before	Date: 08.04.2024; Time:12:30 P.M
8.	Opening of Technical Bid	Date: 08.04.2024; Time: 03:30 P.M
9.	Opening of Price Bid	To be informed to the Technically Qualified Bidders
10.	Tender Paper Fee (non-refundable) including GST	Amount: INR 1,180 /- (Rupees One Thousand One Hundred Eighty only) including GST@18%
11.	Earnest Money Deposit (EMD)	Amount: INR 20,000 /- (Rupees Twenty Thousand only)

All other details can be seen from the Tender Document available on the e-procurement portal of the Government of Odisha ([www.tendersodisha.gov.in](http://www.tendersodisha.gov.in)) and on the website of OMFED ([www.omfed.com](http://www.omfed.com)). OMFED reserves the right to reject any or all bids without assigning any reason thereof.

Sd/-

Managing Director



[www.omfed.com](http://www.omfed.com)

**THE ODISHA STATE CO-OPERATIVE  
MILK PRODUCERS' FEDERATION LTD.**

OMFED, D-02, Sahidnagar, Bhubaneswar – 751007

Tel. No. 0674-2546030, 2546121, 2540576

E-mail Id: [omfed@yahoo.com](mailto:omfed@yahoo.com)

**Tender Notice**

OMFED invites Tender for **Selection of System Integrator for Supply, Installation, Commissioning, Testing and Warranty of IP based CCTV surveillance system with all accessories at Arilo Dairy, OMFED.**

Interested bidders may submit their offers latest by 05:00 P.M. dtd. 05/04/2024. The cost of tender paper is ₹1,000/- + GST 18% along with EMD of ₹20,000/- (Rupees Twenty Thousand Only) to be submitted in favor of OMFED payable at Bhubaneswar. For details visit our official website: [www.omfed.com](http://www.omfed.com).

The corrigendum / amendment to this notice, if required shall be published only in the OMFED web site and will not be published again in newspaper.

OMFED reserves the right to accept or reject any or all the tenders or part thereof without assigning any reason.

**Managing Director**

## 1. Schedule for the Tender

Sl. No.	Parameter	Details
1.	Date of publication of Tender	Date: 07.03.2024; Time: 06:00 P.M
2.	Availability of tender documents on the e-tendering portal of Government of Odisha	Date: 07.03.2024; Time: 10:00 A.M
3.	Last date for sending queries to OMFED	Date: 16.03.2024
4.	Pre-bid meeting	Date: 19.03.2024; Time: 03:30 P.M;
5.	Issue of responses to pre-bid queries, addendum/ corrigendum, if required	Date: 22.03.2024
6.	Bid Due Date	Date: 05.04.2024; Time: 05:00 P.M
7.	Paper Cost & EMD shall be submitted in Hard Copy Original on or before	Date: 08.04.2024; Time:12:30 P.M
8.	Opening of Technical Bid	Date: 08.04.2024; Time: 03:30 P.M
9.	Opening of Price Bid	To be informed to the Technically Qualified Bidders by appropriate means

### OMFED

**The Orissa State Cooperative Milk Producers' Federation Ltd.**

D-2, Saheed Nagar, Bhubaneswar-751007.

Phone No: 0674-2544576, 2546030, 2546121, 2540417, 2540273

Customer Care Telephone No.- 0674-2547119, Fax: 0674-2540974

Email Id: [omfed@yahoo.com](mailto:omfed@yahoo.com)

## 2. DATA SHEET

Sl. No.	Parameter	Details
1.	Name of tender	Selection of System Integrator for Supply, Installation, Commissioning, Testing and Warranty of IP based CCTV surveillance system with all Accessories
2.	Type of tendering	Open tendering
3.	Mode of tendering	e-tender
4.	E-tender site	<a href="http://www.tendersodisha.gov.in">www.tendersodisha.gov.in</a>
5.	OMFED Website	<a href="http://omfed.com/">http://omfed.com/</a>
6.	Date and time for submission of the Tender document by speed post / Registered post / courier	In all working days up to 05:00 PM of 05.04.2024
7.	Tender Paper Fee (non-refundable) including GST	₹1,180.00 (incl. 18% GST) – to be submitted at OMFED Corporate Office (DD in favour of OMFED, BBSR)
8.	Earnest Money Deposit (EMD)	INR 20,000 /- (Rupees Twenty Thousand only) (DD in favour of OMFED, BBSR) – to be submitted at OMFED Corporate Office. MSME Registered bidders are exempted on EMD.
9.	Amount of Performance Security	10% of the total Contract value (excluding taxes) Amount shall be submitted in the shape of DD or Bank Guarantee in the format provided in <b>Annexure 7</b>
10.	Date, time and venue of opening of Technical Bid	03:30 PM of 08.04.2024 Conference hall OMFED Corporate office. D-2, Sahid Nagar, Bhubaneswar-751 007.
11.	Address of OMFED	OMFED, D-2, Sahid Nagar, Bhubaneswar - 751 007 Odisha, India
12.	Point of Delivery & time for Completion of the work	Arilo Dairy, Cuttack within 20 days from the date of issue of <b>work order</b> .
13.	Bid validity period	90 days from the date of opening of the Bid.
14.	Tender document No	IT/02/CCTV/2024/890 dated 07.03.2024

### **3. Disclaimer**

- 3.1 This Tender document is neither an agreement nor an offer by OMFED to the prospective Bidders or any third party. The purpose of this Tender document is to provide interested parties with information to facilitate the formulation of their Bid pursuant to this Tender document.
- 3.2 This Tender document includes statements, which reflect various assumptions and assessments arrived at by OMFED. Such assumptions, assessments and statements do not purport to contain all the information that a Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for OMFED to consider the particular needs of each party who reads or uses this Tender document. The assumptions, assessments, statements and information contained in the Tender document may not be complete, accurate, adequate or correct. Each Bidder must, therefore conduct its own due diligence and analysis and should verify the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this Tender document and obtain independent advice from appropriate sources.
- 3.3 Information provided in this Tender document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information provided is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. OMFED accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.
- 3.4 OMFED, its employees make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations, the law of contract, tort, principles of restitution or unjust enrichment or otherwise for any loss, damage, cost or expense which may arise from or be incurred or suffered in connection with this Tender document, or any matter deemed to form part of this Tender document, or arising in any way in relation to this Bidding Process.
- 3.5 Neither OMFED nor its employees make any representation or warranty as to the accuracy, reliability or completeness of the information in this Tender document. OMFED also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this Tender document.
- 3.6 The Bidder should confirm that the Tender document downloaded by them is complete in all respects including all annexures and attachments. In the event the document or any part thereof is mutilated or missing, the Bidder shall notify OMFED immediately in writing.
- 3.7 If no intimation is received within the last date for submission of Pre-Bid queries, it shall be considered that the Tender Documents received by the Bidder is complete in all respects and that the Bidder is fully satisfied with the Tender Documents.
- 3.8 No extension of time shall be granted to any Bidder for submission of its Bid on the ground that the Bidder did not obtain the complete set of Tender Documents.
- 3.9 This Tender document and the information contained herein are strictly confidential and

privileged and are for the exclusive use of the Bidder to whom it is issued. This Tender document shall not be copied or distributed by the recipient to third parties (other than, to the extent required by Applicable Law or in confidence to the recipient's professional advisors, provided that such advisors are bound by confidentiality restrictions at least as strict as those contained in this Tender document). In the event after the issue of the Tender document, the recipient does not continue with its involvement in the Bidding Process for any reason whatsoever, this Tender document and the information contained herein shall be kept confidential by such party and its professional advisors at all times.

- 3.10 OMFED may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the statements, information, assessment or assumptions contained in this Tender document at any time during the Bidding Process. All such changes shall be uploaded on the website of OMFED. It is the duty of Bidders to visit the website of OMFED regularly and keep themselves updated on the Bidding Process and any communication made in relation to the Bidding Process.
- 3.11 The Bidders or any third party shall not object to such changes/ modifications /additions/alterations as provided in Clause 3.10 above, explicitly or implicitly. Any such objection by the Bidder shall make the Bidder's Bid liable for rejection by OMFED. Further objection by any third party shall be construed as infringement on confidentiality and privileged rights of OMFED with respect to this Tender document.
- 3.12 The Bidder shall not make any public announcements with respect to the Bidding Process, this Tender document and/or the Bidding Documents. Any public announcements to be made with respect to the Bidding Process or this Tender document shall be made exclusively by OMFED. Any breach by the Bidder of this Clause shall be deemed to be in non-compliance with the terms and conditions of this Tender document and shall render the Bid liable for rejection. OMFED's decision in this regard shall be final and binding on the Bidder.
- 3.13 By responding to the Tender document, the Bidder shall be deemed to have confirmed that it has fully satisfied and has understood the terms and conditions of the Tender document. The Bidder hereby expressly waives any and all claims in respect thereof.
- 3.14 The Bid is not transferable.



## 4. Scope of Services

- 4.1 The Bid has been invited under two bid system i.e. **Technical Bid and Financial Bid**.
- 4.2 The System Integrator (SI) shall Supply, Installation, Commissioning, Testing and Warranty of IP based CCTV surveillance system with all accessories in Arilo Dairy, Cuttack.
- 4.3 The BOQ for Arilo Dairy is mentioned below:

Sl. No.	Product / Material Description	Quantity	UOM
1.	5 MP Dome Camera	33	Nos.
2.	5 MP Bullet Camera	21	Nos.
3.	5 MP Bullet Motorized Vari-focal Camera	1	Nos.
4.	2 MP PTZ Camera 200 Mtr	4	Nos.
5.	5 MP Dome Defog Camera	1	Nos.
6.	NVR 32CH 16 SATA	3	Nos.
7.	43" LED Monitor	2	Nos.
8.	8-Port Gigabit Ethernet PoE/PoE+ Unmanaged Switch	10	Nos.
9.	8-port 10/100/1000 Base-T PoE Smart managed switch with 2 Fiber Uplinks	5	Nos.
10.	8-port 10/100/1000 Base-T PoE+ Managed Switch with Fiber Uplinks	4	Nos.
11.	24-port 10/100/1000 Base-T Gigabit PoE+ Managed Switch	2	Nos.
12.	CAT6 Cable Outdoor	2	Bundle
13.	Media Converter Giga	10	Nos.
14.	OFC Splicing	24	Job
15.	Fiber Connectors	20	Nos.
16.	RJ45 Connector Industrial Grade	300	Nos.
17.	OFC Box	20	Nos.
18.	Electrical Accessories (Where electrical connection will be required)	As per actual	
19.	Camera Pole Mounting Box	10	Nos.
20.	Camera Mounting Box	55	Nos.
21.	Surveillance HDD 10TB	8	Nos.
22.	1 KVA UPS	10	Nos.
23.	2.4Ghz elevator wireless bridge	02	Nos.
24.	Installation, Configuration, Testing, Commissioning of 60 CCTV Cameras	1	Job

- 4.4 The SI shall complete the activity at Arilo Dairy, Cuttack within 04 Weeks from the date of signing of agreement.
- 4.5 The detailed scope and specifications of the services, along with the contract period, payment terms, etc. are given in Special Conditions of Contract as enclosed in **Annexure-2**.
- 4.6 The “General Conditions of Contract-Services” as enclosed in the tender at **Annexure-1** shall form an integral part of the Tender document and will also form a part of the Agreement placed against this tender.

## 5. Eligibility Criteria

The Bidders eligible to participate in this tender should fulfill the following Criteria:

Sl. No.	Criteria	Required Documents
5.1	<p><b><u>Technical Criteria</u></b></p> <p>The Bidder must have experience of having successfully executed similar work during the last 3 (Three) years, which shall be either of the following:</p> <p>i) Three similar completed Services of value not less than INR 7 Lakhs each or total number not less than 150 Cameras</p> <p style="text-align: center;">OR</p> <p>ii) Two similar completed Services of value not less than INR 10 Lakhs each or total number not less than 200 Cameras</p> <p style="text-align: center;">OR</p> <p>iii) Single similar completed Service of value not less than INR 15 Lakhs or total number not less than 300 Cameras</p> <p><b><u>Note:</u></b></p> <p>a. "Similar completed Services" shall mean the Bidder should have successfully executed the work of supply, installing, testing, commissioning and maintenance of Integrated IP Based CCTV Surveillance System/IT product integration and expertise in network and security solution system in a government organization (at Central government /State government/ PSU/ government Undertaking).</p> <p>b. Applicable 3 (Three) years shall be preceding five financial years excluding the financial year of floating of the Tender (i.e. FY 2020-21, FY 2021-22 and FY 2022-23)</p>	<p>Self-attested copies of</p> <p>a) Relevant contracts or work orders or agreements containing the scope of services, the value of the contract or work order or agreement; and</p> <p>b) Completion certificate from their clients/employers, regarding successful completion of the services.</p> <p>c) In case value of the contract is not mentioned in the contract or work order or agreement, then the value must be mentioned in the completion certificate issued by the client/employers</p> <p>d) 26 AS Form for respective financial years shall be submitted.</p>
5.2	<p><b><u>Financial Criteria</u></b></p> <p>i) Average financial turnover of the Bidder during the last 3 (three) financial years should be at least INR 20 Lakhs.</p> <p><b>Note:</b></p> <p>a. Applicable 3 (three) years –</p>	<p>a) Copy of Average Turn Over certificate of last 03 years (Year wise turnover) which should be certified by CA.</p> <p style="text-align: center;">OR</p> <p>b) Copies of audited financial statements</p>

	FY2020-21, FY2021-22 & FY2022-23	
5.2.1	OEM Turnover should be more than 800 Cr	Turn Over Copies duly self-attested should be attached.
5.3	Other Criteria	
5.3.1	The Bidder can be either i) a Company (Private or Public), or ii) a registered partnership firm, or iii) an LLP firm	Copies of a) Company (Private or Public) • Certificate of Incorporation • Memorandum of Association • Articles of Association b) Registered partnership firm • Registration certificate • Deed of Partnership c) LLP firm • Certificate of Incorporation • Deed of Partnership
5.3.2	The Bidder should have valid PAN and GSTIN registration	• Copy of PAN • Copy of GST registration certificate – REG 06 – ODISHA GST is mandatory
5.3.3	The Bidder should not have been banned/blacklisted by OMFED or any government agency or any PSU as on the date of submission of Bid	Affidavit to this effect, as per the format given in <b>Annexure 4</b>
5.3.4	Tender Paper Fee, EMD amount and Power of Attorney	a) Proof of Payment of Tender Paper Fee; Please refer to <b>Clause 6.6</b> for further details. b) Proof of Payment of EMD; Please refer to <b>Clause 6.7</b> for further details. c) Power of Attorney (as per format given in <b>Annexure 8</b> ) in favour of the authorized signatory of the bidder. Please refer to <b>clause 6.5</b> for further details.
5.3.5	The Bidder whose Contract/Agreement with OMFED had been terminated /failed to perform will not be eligible to participate in the bidding process.	Decision of OMFED in this regard is final & binding on all such entities
5.3.6	The Bidder/OEM must have a functional offices in Odisha.	Self-Attested Copy of Functional office (s) to be attached.
5.3.7	Bidder / OEM should have own dedicated support center available during working hours and must have atleast 01 Service Center in Odisha to provide onsite support.	Self-Attested copy of Service Center details like detail address to be attached.
5.3.8	Bidder should submit specific authorization from the OEM also for all the devices mentioned in the technical specification.	Copy of OEM Authorization Certificate to be attached. Note: (OMFED will cross verify with the OEM whether Authorization is authenticated or not.)
5.3.9	Products/Materials wise ISO and all	All the copies of quality reports to be

	other quality related certificate need to be submitted	attached.
5.3.10	Compliance Sheet of all products/Materials	Copy of Compliance sheet approved by OEM / Local office of OEM to be submitted. Self-attested copy of the mail or document to be submitted.
5.3.11	All the products / materials should have 03 years Warranty	Copies of supporting documents from OEM to be attached.
5.3.12	OEM should have presence in India for at least 5 Years	Copy of Proper Supporting documents need to be submitted.
5.3.13	Any influence on any of the employees of the Buyer organization to favor the bidder lead to disqualification of the bidder without notice	
5.3.14	Either the Bidder /OEM or its authorized dealer /agents on behalf of the Bidder/OEM will participate. Both cannot bid simultaneously for the same item/product.	
5.3.15	OEM should be CE/FC/UL registered	Copy of supporting documents to be submitted.

**Note:**

- a. The value of the contracts or work orders or agreements to be considered shall be exclusive of all taxes and duties.
- b. The word delivered means that the Bidder ought to have completed the scope of services in the technical capacity above, even if the total contract or Work Order is not completed/ closed. However, Bidder ought to have completed the entire range of services as specified in the Tender document, even if the total Contract is not completed/closed. The Bidder shall also be required to submit a part completion certificate which should clearly indicate the value and the completed portion (physical progress) of the work (which should satisfy requirement of the Tender document). The part completion certificate shall also highlight if the part performance/ progress of the work of the Bidder with respect to the services under consideration, was satisfactory or not.
- c. The technical experience as a sub-contractor to a main agency in a project/Contract awarded by the Competent Authority of principal employer may be considered subject to the condition that the detailed Contract/Work Order covers the entire range of services as mentioned in the Tender document. Following documents shall be furnished by the sub-contractor.
  1. Relevant contracts and Work Orders with the main agency containing the scope of services and the value of the contract or Work Order; and
  2. Completion certificate issued by the Competent Authority/ statutory auditor of the principal employer in favour of the main agency showing due completion of the package.
- d. Bidding in the form of a consortium is **NOT** allowed.

## 6. Instruction to Bidders

- 6.1 The Bidders intending to participate in this tender are required to register on the e-procurement portal of the Government of Odisha ([www.tendersodisha.gov.in](http://www.tendersodisha.gov.in)). This is a onetime activity for registering on the Government website. During registration, the Bidders will be required to attach a Digital Signature Certificate (DSC) to the Bidder's unique user ID. The DSC used should be of appropriate class (Class II or Class III) issued from a registered Certifying Authority. The registration of Bidders on the portal shall be free of cost. The registration shall be in the name of the Bidder, whereas the DSC holder shall be the duly Authorized Signatory of the Bidder.
- 6.2 The tender documents shall be available on the state e-procurement portal ([www.tendersodisha.gov.in](http://www.tendersodisha.gov.in)) and the website of OMFED ([www.omfed.com](http://www.omfed.com)). There shall be no sale of hard copies of the tender documents. Tenders can be accessed by the prospective Bidders at the above websites and may be downloaded by them free of cost. However, the Tender Paper Fee shall have to be paid at the time of bid submission, unless exempted to be paid by the competent authority.
- 6.3 E-tendering process is mentioned in **Chapter 08**.
- 6.4 The bids are to be submitted in two covers, consisting of: (i) Techno-Commercial Bid (under Cover I) and (ii) Price Bid (under Cover II). Both the Techno-Commercial Bid and the Price Bid have to be submitted on the e-procurement portal of the Government of Odisha.
- 6.5 The Authorized Signatory of the Bidder shall be duly authorized by a Power of Attorney authorizing him/her to perform all tasks related to tender submission, including but not limited to sign and submit the bid and to participate in the bidding process on behalf of the Bidder. The format for the Power of Attorney is given in **Annexure 8** of this Bid document. Each page of all scanned documents submitted as part of the Techno-Commercial Bid shall be initialed with date by the Authorized Signatory of the Bidder at the lower left-hand corner of each page. The power of attorney is case of company shall submit the board resolution in this regard.
- 6.6 **Tender Paper Fee**
- 6.6.1 The Bidder shall pay to OMFED a non-refundable amount ("Tender Paper Fee"), indicated in the Data Sheet, as part of its Techno-Commercial Bid. The mode of payment of the Tender Paper Fee is also indicated in the Data Sheet.
- 6.6.2 The Bidders, who are exempted to deposit Tender Paper Fee due to any exemption granted by the Government of Odisha, are required to attach scanned copy of relevant documents evidencing such exemption granted, along with the Techno-Commercial Bid document while submitting online. The Bidders, who does not submit Tender Paper Fee claiming exemption but does not submit relevant document, is ineligible for bidding and such bid shall be summarily rejected.
- 6.7 **Earnest Money Deposit (EMD)**
- 6.7.1 Bidders as part of their Techno-Commercial Bid shall have to submit an Earnest Money Deposit; the amount of the EMD as indicated in the Data Sheet.

**6.7.2 Mode of Payment:** The EMD shall be in the form of DD and in favour of OMFED, Bhubaneswar payable at Bhubaneswar. The mode of submission of the EMD is also indicated in the Data Sheet. For the avoidance of doubt, it is clarified that OMFED shall not be liable to pay any interest on the EMD deposit so made and the same shall be interest free.

**6.7.3 EMD Exemption:** MSME Registered bidders are exempted on EMD. The bidders who are exempted to deposit Earnest Money Deposit (EMD) are required to attach copies of relevant documents evidencing such exemption granted, along with the Techno-Commercial Bid document while submitting. The Bidders, who does not submit EMD Fee claiming exemption but does not submit relevant document, is ineligible for bidding and such bid shall be summarily rejected.

**6.7.4 Return of EMD:**

The EMD of the technically disqualified Bidders shall be returned after declaration of the list of such technically qualified Bidders. The EMD of other unsuccessful Bidders shall be refunded after signing of the Agreement with the Successful Bidder. The return of the EMD shall be in the form of bank transfer to the account of the Bidder by OMFED.

**6.7.5** The EMD of the Preferred Bidder shall be returned upon the Preferred Bidder furnishing the Performance Security.

**6.7.6 Forfeiture of EMD:** The EMD shall be forfeited and appropriated by OMFED as a genuine pre-estimated compensation and damages payable to OMFED for, inter alia, the time, cost and effort of OMFED without prejudice to any other right or remedy that may be available to OMFED hereunder, or otherwise, under the following conditions:

- i) if any of the documents submitted by a Bidder as part of the bid is found to be not genuine or forged or any of the claims, confirmations, statements or declarations of the Bidder is found to be incorrect or inconsistent, or is a case of any material misrepresentation of facts at any point of time during the bid evaluation process;
- ii) if the Preferred Bidder fails to acknowledge and return to OMFED a signed copy of the LoA or Agreement within the timeframe allowed by OMFED;
- iii) if the Preferred Bidder fails to submit the Performance Security within the timeframe allowed by OMFED;
- iv) if a Bidder withdraws its bid before completion of the bidding process during the bid validity period, except as provided in **Clause 6.8**;
- v) If the Bidder has otherwise committed any breach of the terms of this Bid document;
- vi) in case the Preferred Bidder, does not comply with the requirements of the Price Bid;
- vii) in case the Techno-Commercial Bid of a Bidder contains any information on the Price Bid of the Bidder;

- 6.7.7 In case of cancellation of the tender before bid opening date and time, the EMD shall be refunded to respective Bidder's account.
- 6.8 **Bid validity period:** The bid shall initially remain valid and binding on the Bidder for at least 90 (Ninety) days from the Bid Due Date, as given in the Schedule for the Tender. Any bid with a shorter validity period shall be rejected by OMFED. Under exceptional circumstances, OMFED may in writing request the Bidders to extend the bid validity period of their bids. In case the Bidder refuses the request of OMFED to extend its bid, the EMD of such Bidder will be returned to the Bidder. However, such bids will not be evaluated further.
- 6.9 **Issue of clarifications:** Bidders may also send their queries by email; queries received after the last date for sending queries (as per the Schedule for the Tender) may not be considered by OMFED. The responses to the queries received shall be published by OMFED on its website and the same shall also be considered to be a part of the tender documents; however, the source of queries shall not be mentioned.
- 6.10 **Issue of corrigendum / amendment:** At any time prior to the Bid Due Date, OMFED may at its own initiative or in response to a query or clarification requested by a prospective Bidder if found appropriate, issue a corrigendum/ amendment to the tender documents, which shall be available for download on its website and also on the e-procurement portal of the Government of Odisha and the same shall also be considered to be part of the tender documents. In order to give Bidders reasonable amounts of time to take into account such corrigendum / amendment, OMFED may at its own discretion also extend the Bid Due Date.
- 6.11 **Extension of Bid Due Date:** OMFED may, at its discretion, extend the Bid Due Date which shall be related as an act of amendment of this Bid document.
- 6.12 **Acknowledgement by the Bidder:** It shall be deemed that by submitting its bid, the Bidder has:
- i) made a complete and careful examination of the tender documents, including the proforma agreement;
  - ii) received all relevant information requested from OMFED;
  - iii) accepted the risk of inadequacy, error or mistake in the information provided in the tender documents or furnished by or on behalf of OMFED relating to any of the matters related to this tender or otherwise;
  - iv) satisfied itself about the scope of work and services to be delivered/rendered and the extant conditions and all matters, things and information necessary and required for submitting an informed bid and for providing the required services in accordance with the tender documents including the contract (to be signed with OMFED) and performance of all of its obligations thereunder;
  - v) acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information said to be in the bidding documents or ignorance of any of the matters shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from OMFED;

vi) agreed to be bound by the undertakings provided by it under and in terms; and

OMFED shall not be liable for any omission or commission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the tender documents or the bidding process, including any error or mistake therein or in any information or data given by OMFED.

**6.13 Right to accept or reject any/ all bids:** Notwithstanding anything contained in the Tender document, OMFED reserves the right in its sole discretion, without any obligation or liability whatsoever, to accept or reject any or all of the Bids at any stage of the Bidding Process without assigning any reasons, thereof. Further OMFED reserves the right to annul the Bidding Process and / or to reject any or all Bids at any stage prior to the signing of Agreement without thereby incurring any liability to the affected Bidders or any obligation to inform the affected Bidders of the grounds for OMFED's action. Decision of OMFED shall be final and binding in this regard. OMFED reserves the right to reject any bid if at any time, a material misrepresentation is made or uncovered or if the bid received is conditional or qualified.

**6.14 Language of the bid:** The bid and all related correspondence and documents in relation to the bidding process shall be in the English language. Supporting documents and printed literature furnished by the Bidder with the bid may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Bidder. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the bid, the English language translation shall prevail. The English translation of the documents shall be carried out by professional translators and the translator shall certify that he is proficient in both languages in order to translate the document and that the translation is complete and accurate.

**6.15 Bid to be submitted by Bidders:** The bid to be submitted by Bidders shall consist of the Techno-Commercial Bid and the Price Bid.

**6.15.1 Techno-Commercial Bid:** Bidders shall have to submit their Techno-Commercial Bid offline at OMFED, BBSR. The Techno-Commercial Bid should consist of clear and legible copies of all the required documents and should be submitted within the Bid Due Date, as indicated in the Schedule for the Tender. The Techno-Commercial Bid shall contain no information on the Price Bid of the Bidder. The Techno-Commercial Bid shall consist of the following:

- i) Documents Supporting Eligibility Criteria (**Refer Chapter 5**)
- ii) Techno-Commercial Bid checklist as per **Annexure 5**
- iii) Mandate Form for Bank payment as per **Annexure 6**

**6.15.2 Price Bid:** The Price Bid shall be submitted on the e-tender portal of the Government of Odisha as per the price bid format in **Annexure 3**.

**6.16 Material deviation**

**6.16.1** Bids shall be liable for rejection in case of material deviation, that shall include, inter alia, the following:



- i) The Techno-Commercial Bid or any accompanying document or Price Bid submitted by the Bidder is not in accordance with the formats given in this tender document.
- ii) The Techno-Commercial Bid is not accompanied by all the documents required to be submitted in terms of this tender document as per **Clause 6.15.1**
- iii) It does not contain all the information (complete in all respects) as requested in this tender document (in accordance with the formats provided in this tender document);
- iv) The Techno-Commercial Bid is not accompanied by documentary evidence of the credentials of the Bidder(s).
- v) The Techno-Commercial Bid or Price Bid submitted by the Bidder is conditional or qualified.
- vi) The bid submitted by the Bidder is not valid for the minimum bid validity period, as per **Clause 6.8**.
- vii) It is otherwise substantially/ materially in deviation of the terms and conditions of the tender document.

6.16.2 OMFED may waive any nonconformity in the Bid that does not constitute a material deviation, reservation or omission. OMFED may request that the Bidder submit information or documentation, within a reasonable period of time (**Refer Clause 6.19.3**), to rectify nonmaterial nonconformities in the Technical-Commercial Bid related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request of OMFED by the date specified therein, may result in the rejection of its Bid. OMFED, however, is not bound to waive such non-conformity under this **Clause 6.19.2**.

6.17 **Bid preparation cost:** The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by OMFED or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and OMFED shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

6.18 **Opening of Techno-Commercial Bids:** The Techno-Commercial Bids shall be opened as per the schedule indicated in Schedule for the Tender.

#### 6.19 **Evaluation of Techno-Commercial Bids:**

6.19.1 The Techno-Commercial Bids shall first be evaluated to determine whether they are complete, whether the required documents have been submitted in the correct formats and whether the documents have been properly signed by the Authorized Signatory and whether the Techno-Commercial Bid is generally in order. It will be determined whether the Techno-Commercial Bid is of acceptable quality, is generally complete and is

substantially responsive to the tender documents. For purposes of this determination, a substantially responsive Techno-Commercial Bid is one that conforms to all the terms, conditions and specifications of the tender documents without any material deviations (as defined in **Clause 6.16**), objections, conditionality's or reservations.

- 6.19.2 A Techno-Commercial Bid which is not substantially responsive, may be rejected by OMFED, and may not subsequently be made responsive by the Bidder by correction of the material deviations, as defined in **Clause 6.16**.
- 6.19.3 If required, OMFED may ask Bidders to provide clarifications on the submitted documents provided in the Techno-Commercial Bid, if necessary, with respect to any doubts or illegible documents. The Officer Inviting Tender may ask for any other documents of historical nature during Technical Evaluation of the tender. Non submission of legible documents may render the bid nonresponsive. The authority inviting bid reserves the right to accept any additional document. Such clarifications shall be submitted by the Bidder through email. The Bidders shall be allowed a maximum time period of 3 (three) working days for submitting the requisite shortfall documents through email. However, no changes in the Price Bid shall be sought, offered or permitted, nor shall the documents sought be related to the EMD. No modification of the bid or any form of communication with OMFED or submission of any additional documents, not specifically asked for by OMFED will be allowed and even if submitted, they may not be considered by OMFED.
- 6.19.4 The responsive Techno-Commercial Bids shall then be evaluated in detail to determine whether they fulfill the eligibility criteria (as given in **Chapter 5**) and other requirements of the tender, such as submission of all the requisite documents as listed in **Clause 6.12.1**.

## **6.20 Opening and Evaluation of Price Bids**

- 6.20.1 The date and time of opening of the Price Bids shall be communicated to the technically qualified Bidders in writing by e-mail or registered post/Speed Post; the Price Bids of only technically qualified Bidders shall be opened. A comparative statement shall be prepared detailing each price component in the bid and including all components of the Price Bid, as per **Clause 6.15.2**.
- 6.21 **Preferred Bidder:** The Bidder who submits the lowest Price Bid shall be the Preferred Bidder. The Preferred Bidder shall be issued the LoA. OMFED reserves the right to negotiate the price with the Preferred Bidder before issue of the LoA. The Preferred Bidder shall have to acknowledge and accept the LoA by returning a signed copy of the LoA within a period of 03 (Three) days of issue thereof, along with submission of the Performance Security, failing which the issued LoA may be cancelled and EMD of the Preferred Bidder shall be forfeited by OMFED.
- 6.22 **Tie-Bidders:**  
In the event that 2 (two) or more technically qualified Bidders (the "Tie Bidders") have submitted the lowest identical Price Bids. OMFED shall hold an auction amongst such Tie Bidders. The auction shall be held at Corporate Office of OMFED and only the Tie Bidders shall be invited to attend the same, wherein they have to physically submit their revised Price Bids on their letterhead (with company rubber stamp) and in sealed covers. Hence the Authorized Signatory of the Tie Bidders are required to attend such auction. The revised Price Bid (the "Revised Price Bid") submitted by a Tie Bidder during the

auction should be lower than Price Bid already submitted by it, else the revised Price Bid shall not be considered by OMFED for further evaluation. The Tie Bidder who offers the lowest revised Price Bid in such auction shall be declared to be Preferred Bidder and the lowest revised Price Bid received by OMFED during such auction shall be the L1 price. In the event that the Authorized Signatory of a Tie Bidder is not present during the auction or the Authorized Signatory of such Bidder does not or is unwilling to participate in such auction, the auction would be held amongst the remaining Tie Bidders and if there be only one remaining Tie Bidder, the latter will be declared as the Preferred Bidder, provided that the revised Price Bid submitted by such Bidder is lower than that its earlier submitted Price Bid; in such as case the revised Price Bid submitted by such Bidder shall be considered to be the L1 price. In case of a second round of tie between the revised Price Bids submitted by the Tie Bidders, the Bidder with the higher average annual turnover (to be determined by OMFED on the basis of the audited financial statements submitted by such Bidders as part of their Techno-Commercials Bids) in the last 3 (three) financial years shall be declared as the Preferred Bidder and the L1 price shall be the revised Price Bid submitted by such Bidder during the auction.

**6.23 Signing of Agreement:**

Within 03 (Three) days of receipt of the signed copy of the LoA, along with the Performance Security, the Agreement shall be signed by the Preferred Bidder, failing which the Performance Security shall be forfeited and appropriated by OMFED. Upon signing of the Agreement, the Preferred Bidder shall be considered to be the “Successful Bidder”. The pro-forma of the Agreement is provided in **Annexure 2A** hereof. Post signing of the Agreement, OMFED shall issue Service Order(s) to the Successful Bidder.

**6.24 Performance Security:** The formula for calculating the amount of the Performance Security is indicated in the Data Sheet. The Preferred Bidder shall submit the Performance Security at the Head Office, OMFED upon issue of LoA within a period of 15 (fifteen) days. Performance Security shall be in the form of a Bank Guarantee from any Nationalized/ Scheduled Bank invocable at their branch in Bhubaneswar as per the format given in Annexure 7 or in the form of demand draft from a scheduled commercial bank and payable in Bhubaneswar, Odisha. Performance Security in the form of BG should be operable for invocation at any Nationalized/ Scheduled bank at Bhubaneswar.

The Performance Security will be valid for 12 (Twelve) months for each Contractual Year and the Performance Security shall be extended and adjusted for the next Contractual Year upon receiving the letter from OMFED to commence the subsequent Contractual Year's operation. The Performance Security shall be released on completion of the scope of services and shall be released after a period of 60 (sixty) days post completion of the scope of services, as evidenced by issue of completion certificate by OMFED designated officer/ key contact for this contract.

## **7. Additional Information to Bidders**

### **7.1 Pre-bid meeting:**

7.1.1 A pre-bid meeting shall be organized by OMFED; the date and time of the pre-bid meeting is indicated in the Schedule for the Tender. Bidders wishing to attend the pre-bid meeting should inform OMFED by email (Refer Data Sheet), along with the names and email ids of the officials/ representatives of the Bidder who would be attending the meeting, at least 1 (one) working days before the pre-bid meeting. OMFED shall then send the invite for the pre-bid meeting to the email-ids that OMFED would be receiving.

7.1.2 However, attendance of the Bidders at the pre-bid meeting is not mandatory. A maximum of two officials/ representatives from each Bidder may attend the pre-bid meeting. All costs of the Bidder related to attending the pre-bid meeting shall be borne by the Bidder.

## 8. Additional Information on E-tendering process

- 8.1 The e-tendering process shall be held on the e-procurement portal of the Government of Odisha ([www.tendersodisha.gov.in](http://www.tendersodisha.gov.in)). All the steps involved starting from hosting of tenders till determination of the Selected Bidder shall be conducted online on the e-procurement portal.
- 8.2 The Bidder will have to accept unconditionally the online user portal agreement which contains the acceptance of all the terms and conditions including commercial and general terms and conditions and other conditions, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line in order to become an eligible Bidder. No conditional bid shall be allowed / accepted.
- 8.3 The Bidder will have to give an undertaking online that if the information/declaration/scanned documents furnished in support of the same in respect of eligibility criteria are found to be wrong or misleading at any stage, they will be liable to punitive action and this includes forfeiture of EMD and cancellation/termination of contract/Agreement.
- 8.4 The Bidder will submit their Techno-Commercial Bid and Price Bid on-line. The Bidders will have to upload a scanned copy of the Techno-Commercial Bid in Cover-I; the Price Bid is to be submitted in Cover-II.
- 8.5 Procedure for bid submission and payment of Tender Paper Fee and EMD.
  - 8.5.1 **Log on to e-procurement portal:** The Bidders have to log onto the e-procurement portal of the Government of Odisha ([www.tendersodisha.gov.in](http://www.tendersodisha.gov.in)) using their digital signature certificate and then search and then select the required active tender from the "Search Active Tender" option. Then the submit button can be clicked against the selected tender so that it comes to the "My Tenders" section.
  - 8.5.2 **Uploading of the Techno-Commercial Bid and the Price Bid:** The Bidders have to upload the required Techno-Commercial Bid and the Price Bid, as mentioned in the tender document and in line with the Works Department office memorandum no.7885, dated 23 July 2013.
  - 8.5.3 **Payment of Tender Paper Fee and EMD:** Tender Paper Fee and EMD shall be paid offline as mentioned in the data sheet.
  - 8.5.4 **Bid submission:** Only after receipt of intimation at the e-procurement portal regarding successful transaction by Bidder, the system will activate the 'Freeze Bid Submission' button to conclude the bid submission process.
  - 8.5.5 **System generated acknowledgement receipt for successful bid submission:** System will generate an acknowledgement receipt for successful bid submission. The Bidder should make a note of 'Bid ID' generated in the acknowledgement receipt for tracking their bid status.
  - 8.5.6 **Settlement of EMD on submission of bids:** The Bank will remit the Earnest Money Deposit on cancellation of bids to respective Bidder's account as per direction received from Tender Inviting Authority through e-procurement system.
  - 8.5.7 **Forfeiture of EMDs:** The forfeiture of EMD on submission of bid of defaulting Bidder may be occasioned for various reasons. In case the EMD Deposit on submission of bid is forfeited, the e-Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account

- of the Tender Inviting Authority, i.e. OMFED.
- 8.6 **Price Bid:** The price bid containing the bill of quantity will be in Excel format (or any other format) and will be uploaded by OMFED during tender creation. This will be downloaded by the Bidder and will be used to quote the Price Bid, inclusive of all taxes & duties etc. Thereafter, the Bidder will upload the same Excel file during bid submission in Cover-II. The L1 price will be decided for module as stipulated in the tender. The Price Bid of the Bidders will have no conditions. The Price Bid which is incomplete and not submitted as per instructions given shall be summarily rejected by OMFED without any further reference to the Bidder.
- 8.7 **Modification of bids:** Modification of the submitted bid shall be allowed online only before the Bid Due Date. A Bidder may modify and resubmit the bid online as many times as he may wish. Bidder may withdraw only once its Bid online within the end date of Bid submission.
- 8.8 **Opening of Techno-Commercial Bids:** The Techno-Commercial Bids shall be opened as per the schedule given in the Schedule of Tender. The Techno Commercial bids (Cover-I) will be decrypted on-line and will be opened by the designated bid openers of OMFED with their Digital Signature Certificates (DSC). The Techno-Commercial Bids shall be opened as per the schedule, irrespective of the number of bids received. Even in case of receipt of single bid, the Techno-Commercial Bid shall be opened for evaluation. In case no bids are received, the tender shall be automatically cancelled with approval of the competent authority of OMFED.
- 8.9 **Evaluation of Techno-Commercial Bids:** The Techno-Commercial Bids shall be evaluated in terms of **Clause 6.19**. If required, OMFED may ask Bidders to provide clarifications on their bid or provide shortfall documents within a period of 3 (three) working days. The Bidders will get this information on their personalized dash board under “Upload shortfall document/information” link. However, no changes in the Price Bid shall be sought, offered or permitted, nor shall the documents sought be related to the EMD or the Tender Paper Fee. No modification of the bid or any form of communication with OMFED or submission of any additional documents which are not specifically asked for by OMFED, will be allowed and even if submitted, they will not be considered by OMFED. Additionally, information shall also be sent by system generated e-mail and SMS, but it will be the Bidder’s responsibility to check the updated status/information on their personalized dash board at least once daily after opening of bid. No separate communication will be required in this regard. Non-receipt of email and SMS will not be accepted as a reason for non-submission of documents within prescribed time. The Bidder shall submit the requisite clarifications and the requested documents and in the Upload Shortfall document section of the e-procurement portal within the specified period and no additional time will be allowed for submission of the clarifications/ documents. In case of any failure of the Bidder to submit the requisite documents within the allowed timeframe, OMFED shall proceed to evaluate its Techno-Commercial Bid without any further reference to the Bidder.
- 8.10 Based on the evaluation of the Techno-Commercials Bids, the list of technically qualified Bidders shall be prepared and the same shall be uploaded, along with the date and time of opening of Price bid in the portal and such Bidders shall also be informed through system generated e-mail and SMS alert. The Price Bid of such

shortlisted Bidders shall be decrypted and opened on the scheduled date and time by the designated bid openers of OMFED with their Digital Signature Certificates. The Bidders may view the price bid opening online remotely on their personalized dash board under the link “Bid Opening (Live)” and can see the Price Bid /BOQ submitted by all shortlisted Bidders.

- 8.11 A comparative statement of the Price Bids shall be generated by the e-procurement system. The same shall be downloaded and will be signed by the officers of OMFED opening the Price Bids and submitted to the competent authority of OMFED for approval and further necessary action. The comparative statement shall also be viewable to the participating Bidders whose Price Bids were opened. In case of tie bids, the same shall be dealt with in terms of **Clause 6.22**.
- 8.12 Upon approval and completion of the due process of OMFED, the Preferred Bidder shall be issued the LoA in terms of **Clause 6.21**. The LoA shall be sent through registered/ speed post to the office address of the Preferred Bidder; a scanned copy of the Agreement/Service Order shall also be uploaded on the e-procurement portal.

## **Annexure 1: General Conditions of Contract-Services**

### **1. Definitions**

In the interpretation of the Contract and the general and special conditions governing it, unless the context otherwise requires:

- 1.1 "Contract Price" or "Contract Value" shall mean the price payable to the Service Provider under the Service Order / Agreement for the full and proper performance of his contractual obligations;
- 1.2 "Service Order" or "Contract" or "Agreement" shall mean the Service Order / Agreement and all attached exhibits and documents referred to therein and all terms and conditions thereof together with any subsequent modifications thereto;
- 1.3 "Site" shall mean the place or places named in the Service Order / Agreement or such other place or places at which any work has to be carried out as may be approved by OMFED;
- 1.4 "Service Provider" or "Contractor" shall mean a firm or company with whom the Service Order / Agreement is placed and shall be deemed to include the supplier in successors (approved by OMFED) representatives, heirs, executors, administrators and permitted assignee as the case may be;
- 1.5 "Services" means the services specified in the Service Order which the Service Provider has agreed to supply under Service Order / Agreement;

### **2. Scope of Services**

- 2.1 Scope of Services shall be as defined in the Special Conditions of Contract and Annexure thereto.

### **3. Instructions, Direction & Correspondence**

- 3.1 All instructions and orders to Service Provider shall, excepting what is herein provided, be given by OMFED.
- 3.2 All the work shall be carried out under the direction of and to the satisfaction of OMFED.
- 3.3 All communications including technical/commercial clarifications and/or comments shall be addressed to OMFED shall always bear reference to the Service Order / Agreement.
- 3.4 Invoices for payment against Service Order / Agreement shall be addressed to OMFED.
- 3.5 The Service Order / Agreement number shall be shown on all challans / invoices, communications, packing lists, containers and bills of lading (as applicable), etc.



#### **4. Service Order / Agreement Obligations**

- 4.1 If after award of the LoA, the Service Provider does not acknowledge the receipt of award or fails to furnish the Performance Security within the prescribed time limit (as the case maybe), OMFED reserves the right to cancel the LoA and forfeit the EMD.
- 4.2 Once a Service Order / Agreement is accepted and confirmed and signed, the terms and conditions contained therein shall take precedence over the Service Provider's bid and all previous correspondence.
- 4.3 The Service Order/ Agreement shall, in all respects, deemed to be and shall construe and operate as an Indian Contract in conformity with the Indian Laws.

#### **5. Modification in Service Order / Agreement**

- 5.1 All modifications leading to changes in the Service Order / Agreement with respect to technical and/or commercial aspects including terms of delivery of services, shall be considered valid only when accepted in writing by OMFED by issuing amendment to the Service Order / Agreement. Issuance of acceptance or otherwise in such cases shall not be any ground for extension of agreed delivery date and also shall not affect the performance of Service Order / Agreement in any manner except to the extent mutually agreed through a modification of Service Order / Agreement.
- 5.2 OMFED shall not be bound by any printed conditions or provisions in the Service Provider's Bid Forms or acknowledgment of Service Order / Agreement, invoices and other documents which purport to impose any conditions at variance with or supplemental to Service Order / Agreement.

#### **6. Use of Service Order / Agreement Documents & Information**

- 6.1 The Service Provider shall not, without OMFED's prior written consent, disclose any approved plan, drawing, pattern, sample or information furnished by or on behalf of OMFED in connection therewith, to any person other than a person employed by the Service Provider in the performance of the Service Order / Agreement. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purpose of such performance.
- 6.2 The Service Provider shall not, without OMFED's prior written consent, make use of any document or information enumerated in **Clause 6.1** except for purpose of performing the Service Order / Agreement.

#### **7. Patent Rights, Liability & Compliance of Regulations**

- 7.1 Service Provider hereby warrants that the use of the services delivered hereunder will not infringe claims of any patent covering such service and Service Provider agrees to be responsible for and to defend at his sole expense all suits and proceedings against OMFED based on any such alleged patent infringement and to pay all costs, expenses and damages which OMFED may have to pay or incur by reason of any such suit or proceedings.
- 7.2 The Service Provider shall indemnify OMFED against all third-party claims of

infringement of patent, trade mark or industrial design rights arising from the services delivered by the Service Provider.

- 7.3 Service Provider shall be responsible for compliance with all requirements under the laws and shall protect and indemnify completely OMFED from any claims/penalties arising out of any infringements.

## **8. Performance Security**

- 8.1 The Service Provider shall furnish Performance Security as per the terms and conditions provided in the Tender document.
- 8.2 The Performance Security shall be for due and faithful performance during the period of execution of the services and is liable for forfeiture in the following cases:
- If the successful Bidder fails to undertake the work after issuance of LoA, or
  - If the Service Provider abandons the work before its completion or during its extended period, or
  - If the work performed by the Service Provider is not as per the Agreement, or
  - On breach of Service Order / Agreement by the Service Provider.
- 8.3 The proceeds of Performance Security shall be appropriated by OMFED as compensation for any loss resulting from the Service Provider's failure to complete his obligations under the Service Order / Agreement without prejudice to any of the rights or remedies OMFED may be entitled to as per terms and conditions of Service Order / Agreement.
- 8.4 Performance Security shall be extended by the Service Provider in the event of delay in completion of work, as defined in the Service Order / Agreement for any reason whatsoever. OMFED's claim period shall remain valid for twelve months after the expiry of the guarantee/warranty/Defect Liability Period or till the satisfactory performance of the objectives of the Service Order / Agreement, whichever is later.
- 8.5 For the avoidance of doubt, it is hereby clarified, that the Performance Security shall not carry any interest.

## **9. Delivery of Services**

- 9.1 Delivery of the Services shall be made by the Service Provider in accordance with terms specified in the Special Conditions of Contract.
- 9.2 The delivery terms are binding and essential and consequently, no delay is allowed without the written approval of OMFED. Any request concerning delay will be null and void unless accepted by OMFED.

## **10. Terms of Payment**

- 10.1 Details about the method of payment, payment terms, billings, place of payment, etc. under this Service Order / Agreement shall be specified in the Special Conditions of Contract.
- 10.2 All payments shall be made in INR only and shall be made directly to the bank account of the Service Provider.

- 10.3 No advance shall be paid and no letter of credit shall be issued.
- 10.4 Payment shall be released within 30 (thirty) days after receipt of relevant documents complete in all respects.
- 10.5 No interest charges for delay in payments, if any, shall be payable by OMFED.
- 10.6 Defective bills shall be returned to the Service Provider within 7 (seven) working days. No payment shall be made on defective/incomplete bills.

## **11. Subcontracting /out-sourcing/ sub-letting/ Assignment**

- 11.1 The Service Provider is not allowed to subcontract, outsource, sub-let or assign the contract and scope of services, either partly or wholly, without the written approval of the designated official or Nodal Officer from OMFED side for the services for which such subletting is sought. However, OMFED management reserves the full right to refuse any such approval to the Service Provider without being bound to provide any reason or rationale for such decision. Provided, nevertheless, that any such consent shall not relieve the Service Provider from any obligation, duty or responsibility under the Service Order / Agreement.

## **12. Cancellation of Service Order / Agreement**

- 12.1 If the Service Provider fails to fulfil the terms and conditions of the Service Order / Agreement which are spelt out in the Tender Document, OMFED shall have the right to terminate the Service Order / Agreement and award the total or balance work (if any) to any other Service Provider at the risk and cost of the said Service Provider after giving 30 days' notice to the Service Provider as to why the said work shall not be awarded to another entity at his risk and cost. Further the Service Order/Agreement could be terminated by OMFED if:

- i) There is a force-majeure situation,
- ii) Service Provider has given false declaration or document including affidavit,
- iii) There is conflict of interest between OMFED& Service Provider during the Service Order / Agreement execution,
- iv) The Service Provider defaults in proceeding with the work as per the milestones and/or in complying with any of the terms and conditions, stipulated in the Service Order / Agreement,
- v) The Service Provider or firm or any of the partner represented by the Service Provider, in the subject Service Order / Agreement is adjudged as Insolvent by the concerned authority and further if the Service Provider has been wound up and dissolved,
- vi) The Service Provider assigns/transfers/sub-lets the entire work or a portion thereof without the approval of the Competent Authority,
- vii) The Service Provider offers to give or agrees to give gift or any other consideration tangible or intangible, as inducement or reward for seeking or offering benefits in the Service Order / Agreement as the case may be,
- viii) A court order or an order of a competent statutory forum is received in respect of the Service under consideration of the Service Order / Agreement.

Termination of the agreement shall not relieve the Service Provider of any obligations which expressly or by necessary implication survives termination. Except as otherwise provided in any provisions of the agreement expressly limiting the liability of the Service Provider, shall not relieve the Service Provider of any obligations or liability for loss or damage to OMFED arising out of or caused by acts or omissions of the Service Provider prior to the effective date of termination or arising out of such termination. Even if Service Order / Agreement is terminated/abandoned prematurely, OMFED reserves the right to deduct/impose penalties and shall remain indemnified, till such time all or any such claims are suitably addressed. OMFED reserves the right to appropriate the Performance Security, as a genuine pre-estimated damages suffered by OMFED for the non-performance by the Service Provider. OMFED may also impose further penalties on the Service Provider such as holidaying/banning/blacklisting for a specific period of time. In all such cases, the decision of OMFED shall be final. This notice shall be in accordance with **Clause 12.1**.

### **13. Right to risk for procurement / rendering of services**

If the Service Provider fails to fulfill the terms and conditions of the Service Order / Agreement, OMFED shall have the right to procure the services from any other party for the execution/ completion of the scope of services under the Service Order / Agreement and recover from the Service Provider all charges/expenses/losses/damages which may be suffered by OMFED, at the risk and cost of the Service Provider, after giving 15 (fifteen) days of notice to the Service Provider. This will be without prejudice to the rights of OMFED for any other action including termination of the Service Order / Agreement.

### **14. Force Majeure**

- 14.1 “Force Majeure Event” means any event or circumstances or combination of events or circumstances which:
- A. Are beyond the reasonable control of the Party affected by such event (the Affected Party); and cannot by exercise of reasonable diligence, reasonable precautions and reasonable alternative measures (where sufficient time to adopt such precautions or alternative measures before the occurrence of such event or circumstances is available), be prevented or caused to be prevented;
  - B. Materially and adversely affects such Party’s performance of its duties or obligations or enjoyment of its rights under this Service Order / Agreement.
- 14.2 As soon as practicable and in any case within 7 (seven) days from the date of occurrence of a Force Majeure Event or the date of knowledge thereof, the Affected Party shall notify the other Party of the same, setting out the details of the Force Majeure Event.
- 14.3 If the Affected Party is rendered wholly or partially incapable of performing any of its obligations under this Service Order / Agreement because of a Force Majeure Event, it shall be excused from performance of such obligations to the extent it is unable to perform the same on account of such Force Majeure Event.
- 14.4 If a Force Majeure Event described above, in the reasonable judgment of the Parties, is likely to continue beyond a period of 6 (six) months or any other period as stipulated in the Bid document, the parties may mutually decide to terminate the Service Order /

Agreement or continue the Service Order / Agreement on mutually agreed revised terms.

## **15. Dispute Resolution**

- 15.1 Any dispute, difference or controversy of whatever nature howsoever arising under, or out of, or in relation, to this tender or the Service Order / Agreement (including its interpretation) between OMFED and the Service Provider, and so notified in writing by either party to the other party shall, in the first instance, be attempted to be resolved amicably and the parties agree to use their best efforts for resolving all disputes arising under or in respect of this tender promptly, equitably and in good faith. In the event of any dispute between the parties, it is agreed that a discussion shall be held between the Service Provider and OMFED within 7 (seven) days from the date of reference to discuss and attempt to amicably resolve the dispute. If such meeting does not take place within the 7 (seven) days period or the dispute is not amicably settled within 15 (fifteen) days of the meeting, the dispute, if referred to, shall be decided by the Civil Court of competent jurisdiction at Bhubaneswar only. There shall be no arbitration between the Parties. The provisions of Arbitration & Conciliation Act, 1996 as amended from time to time, shall have no application to the present work.
- 15.2 Governing law and jurisdiction: This Service Order / Agreement shall be construed and interpreted in accordance with and governed by the laws of State and Central Government in force in India. The Courts at Bhubaneswar alone shall have exclusive jurisdiction over all matters arising out of or relating to this Service Order / Agreement.

## **16. Governing Language**

The Service Order / Agreement shall be written in English language as specified by OMFED in the Instruction to Bidders. All literature, correspondence and other documents pertaining to the Service Order / Agreement which are exchanged by the parties shall be written in English language. Printed literature in other language shall only be considered, if it is accompanied by an English translation. For the purposes of interpretation, English translation shall govern and be binding on all parties.

## **17. Notices**

Any notice given by one party to the other pursuant to the Service Order / Agreement shall be sent in writing or by email. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

## **18. Permits & Certificates**

- 18.1 Service Provider shall procure, at his expense, all necessary permits, certificates and licenses required by virtue of all applicable laws, regulations, ordinances and other rules in effect at the place where any of the work is to be performed, and Service Provider further agrees to hold OMFED harmless from liability or penalty which might be imposed by reason of any asserted or established violation of such laws, regulations, ordinances or other rules.

## **19. General**

- 19.1 The Service Provider shall be deemed to have carefully examined all Service Order / Agreement documents to its entire satisfaction. Any lack of information shall not in any way relieve the Service Provider of his responsibility to fulfill his obligation under the

Service Order / Agreement documents.

- 19.2 The General Conditions of Contract (GCC)-Services shall apply to the extent that they are not superseded by provisions of other parts of the Special Conditions of Contract.

**19.3 Losses due to non-compliance of Instructions**

Losses or damages occurring to OMFED owing to the Service Provider's failure to adhere to any of the instructions given by OMFED in connection with the contract execution shall be recoverable from the Service Provider.

**19.4 Recovery of sums due**

All costs, damages or expenses which OMFED may have paid, for which under the Service Order / Agreement, the Service Provider is liable, may be recovered by OMFED (he is hereby irrevocably authorized to do so) from any money due to or becoming due to the Service Provider under this Service Order / Agreement or other Service Orders / Agreements and/or may be recovered by action at law or otherwise. If the same due to the Service Provider be not sufficient to recover the recoverable amount, the Service Provider shall pay to OMFED, on demand, the balance amount.

**20. Liability and Indemnity**

- 20.1 Service Provider shall indemnify, defend and hold OMFED harmless against:

- a. any and all third party claims, actions, suits or proceedings against OMFED, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of breach by the Service Provider of any of its obligations under the Service Order / Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent actor omission, breach of the Service Order / Agreement, or breach of statutory duty on the part of OMFED, its suppliers and Service Providers, employees, servants or agents; and
- b. any and all losses, damages, costs, and expenses including legal costs, fines, penalties and interest actually suffered or incurred by OMFED from third party claims arising by reason of breach by the Service Provider of any of its obligations under this Service Order / Agreement, except to the extent that any such losses, damages, cost & expenses including legal costs, fines, penalties and interest (together to constitute "Indemnifiable Losses") have arisen due to negligent act or omission breach of the Service Order / Agreement, or breach of statutory duty on the part of OMFED, its suppliers or Service Providers, employees, servants or agents or any of the representations; and
- c. To the extent of the value of free issue materials to be issued till such time the entire Service Order / Agreement is executed and proper account for the free issue materials is rendered and the left over / surplus and scrap items are returned to OMFED. The Service Provider shall not utilize OMFED's free issue materials for any job other than the one contracted out in this case and also not indulge in any act, commission or negligence which will cause / result in any loss/damage to OMFED and in which case, the Service Provider shall be liable to OMFED to pay compensation to the full extent of damage / loss and undertake to pay the same.

- 20.2 OMFED remains indemnified (even if the Service Order / Agreement ends prematurely) towards all or any obligations due to OMFED by the Service Provider and shall continue to remain in force till such time all or any such claims are suitably addressed.

## **21. Publicity & Advertising**

Service Provider shall not without the written permission of OMFED make a reference to OMFED or any Company affiliated with OMFED or to the destination or the description of goods or services supplied under the Service Order / Agreement in any publication, publicity or advertising media.

## **22. Blacklisting**

Blacklisting of a business concern/entity or supplier may be resorted to in following cases: -

- i) If the Proprietor or Partner or Director of the business concern/entity is convicted by a Court of Law, following prosecution under the normal process of Law for an offence involving moral turpitude in relations to business dealings;
- ii) If security consideration of the state i.e. any action that jeopardize the security of the State.
- iii) If there is justification for believing that the Proprietor or Partner or Director of the Concern/entity has been guilty of malpractices such as bribery, corruption, cheating, fraud and tender fixing etc.
- iv) If the business concern/entity refuses / fails to return OMFED's dues without adequate cause;
- v) If the business concern/entity is blacklisted by any Department of the Central Government / State Government/Central PSU/State PSU.
- vi) If the business concern/entity is a concern/entity evader of Central / State taxes / duties for which OMFED has received notice from the concerned department of Central / State Govt.
- vii) If violation of important conditions of contract/agreement.
- viii) If submission of false/fabricated/forged documents for consideration of a tender

## **23. Statutory and Legal requirements**

- 23.1 The Service Provider shall comply with all the statutory and legal requirements and requirements for obtaining license under the Contract Labour (Regulation and Abolition) Act 1970 and shall bear all necessary expenses in this regard.
- 23.2 The Service Provider shall abide by the applicable statutory provisions on minimum wages, payment of wages, EPF, ESI, gratuity, retrenchment, leave and leave encashment, health care, uniform and compensation to its employees and workmen.
- 23.3 The Service Provider shall not take any action in relation to handling of its personnel which may adversely affect the existing labour relations of OMFED. The Service Provider has to maintain close liaison and cordial relations with the local people and the unions.

## **24. Safety**

- 24.1 OMFED may from time to time audit the safety practices employed by the Service Provider and the Service Provider shall comply with the recommendations/ directions made by OMFED as a result of such audit.

- 24.2 During the course of the contract period, if any accident occurs whether major or minor in which the Service Provider or its employees are involved or are responsible, the Service Provider shall immediately inform OMFED without any delay.
- 24.3 The Service Provider shall indemnify OMFED from any liability falling on OMFED due to any accident, whether minor or major, or by any act of commission/omission by the Service Provider or by its representatives or by its employees. If OMFED is made liable for any such claim by the court of law or any other authority, the same shall be reimbursed to OMFED by the Service Provider as if OMFED has paid on their behalf. The same shall be adjusted from the invoices payable by OMFED to the Service Provider, if not paid within a period of 30 (thirty) days of such payment being made by OMFED.



## **Annexure 2: Special Conditions of Contract**

### **1. General**

These Special Conditions of Contract delete, amend or add to the clauses in the General Conditions of Contract. In the event of an inconsistency, these Special Conditions of Contract shall supersede or take precedence over the General Conditions of Contract to the extent of that inconsistency.

### **2. Scope of work, service requirements including technical parameters**

#### **2.1 Background**

The Orissa State Cooperative Milk Producers' Federation Limited (OMFED) is an apex level Dairy Cooperative Society registered under Cooperative Society Act – 1962. It has come into existence to integrate the milk producers in rural areas with consumers in the urban areas with an enterprising aptitude.

OMFED's main activities include promoting, production, procurement, processing and marketing of milk, milk products and subsidized cattle feed for economic development of the rural farming community in Orissa. With a large number of employees spread across multiple locations, OMFED is attempting to implement CCTV Surveillance system for Arilo Dairy, OMFED. Currently Arilo Dairy is facing lot of security concern which is impacting the daily activities. To address these concerns, OMFED has decided to implement CCTV Surveillance system to overcome the security challenges and to monitor the same centrally.

The CCTV Surveillance system shall not only help Arilo Dairy, OMFED to streamline its security process but also provide a secure and reliable system for monitoring movement. OMFED is looking out for vendors who can provide a robust and reliable solution that meets the functional and technical requirements outlined in this Tender Document. The selected vendor shall be responsible for the supply, implement, and provide maintenance of the system. The project implementation is expected to be completed within the timeline as mentioned in the below section. The vendor shall be required to provide training to OMFED's staff on the usage and maintenance of the system. Post-implementation support and maintenance shall be required for a period of 3 years from the date of CCTV Surveillance System Go-live.

#### **2.2 Implementation Scope**

It is intended to have the complete end-to-end solution to implement CCTV Surveillance System. The selected vendor shall be required to perform the complete scope. The following is the detailed scope of work. The same is inclusive and not exclusive in nature.

- a. The vendor is required to supply, install, configure, and maintain the CCTV Surveillance System for Arilo Dairy, Cuttack as per the specifications/ features mentioned in the tender.
- b. The CCTV installation process will be carried out in specific locations specified by OMFED.
- c. The specified places will be informed before the installation activity will commence.
- d. All the CCTV Surveillance System should have night vision capability.
- e. The video management system shall have the capability to connect unlimited number of cameras, recording servers and clients to be connected to management server across multiple sites. The video management system shall include a distributed architecture allowing clients on the host system with the user rights to view video.

- f. Sources on Mobile app/Website from a remote location.
- g. Control room setup for a cluster of cameras with recording and monitoring in a distributed architecture for the total surveillance system.
- h. Recording the videos of all the cameras on 24x7 basis @HD or better for 60 days with option to increase the storage duration to 90days or more.
- i. For storage of the videos, the solution should include the servers/storage with the help of Network Video Recorder (NVR) or Network Attached Storage (NAS)/ Encoders/Decoders/ Client work stations etc. to make a complete functional open IP based CCTV system.
- j. The System should facilitate viewing of live and recorded images and controlling of all cameras by the authorized users simultaneously without any degrading in quality. System should provide database connectivity, reporting, and communication protocols.
- k. The feed from different locations should go to the Centralized Command and Control Room, where the number of viewing screens (Video Wall) will be installed, number of cameras to be simultaneously viewed on Video Wall.
- l. The CCTV Surveillance System shall work 24\*7\*365 without any breakdown.

### 2.3 Technical Specifications

5 MP Fixed Dome camera	
Technical	Specification
Camera	
Image Sensor	½.7" CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.005 lux@F1.4 (Color, 30 IRE) 0.0005 lux@F1.4 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	50 m (164.0 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Lens	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F1.4
Field of View	2.8 mm: Horizontal: 97°; Vertical: 71°; Diagonal: 129° 3.6 mm: Horizontal: 80°; Vertical: 57°; Diagonal: 107° 6 mm: Horizontal: 50°; Vertical: 37°; Diagonal: 64°
Iris Type	Fixed

Close Focus Distance	2.8 mm: 1.1 m (3.61 ft) 3.6 mm: 1.7 m (5.58 ft) 6 mm: 3.3 m (10.83 ft)
<b>Professional, Intelligent</b>	
IVS (Perimeter Protection)	Tripwire, intrusion (support the classification and accurate detection of vehicle and human)
SMD 3.0	Less false alarm, longer detection distance
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face snapshot set as face or one-inch photo; 3 snapshot strategies (real-time snapshot, optimization snapshot, and quality priority); face angle filter; optimization time setting
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
<b>Video</b>	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 2592 × 1944 @ (1–25/30) fps Sub stream 1: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps) Sub stream 2: 1920 × 1080 @ (1–25/30 fps) Sub stream 3: 1280 × 720 @ (1–25/30 fps)
Stream Capability	4 streams
Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240); VGA (640 × 480)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	YES
HLC	YES
WDR	120db
Scene Self-adaptation (SSA)	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Rol)	Yes (4 areas)
Defog	Yes
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution and lower.)
Mirror	Yes

Privacy Masking	4 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; less service time of SD card (smart card supports); network disconnection; IP conflict; illegal access; voltage detection; security exception; motion detection; video tampering; scene changing; intensity change; tripwire; intrusion; SMD
<b>Network</b>	
Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	Ipv4; Ipv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UpnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI
Scene Self-adaptation	Yes
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	As Per OEM
Mobile Phone	IOS; Android
<b>Certifications</b>	
Certifications	CE-LVD:EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC:47 CFR FCC Part 15, Subpart B; UL/CUL:UL62368-1 & CAN/CSA C22.2 No. 62368-1-14;
<b>Power</b>	
Power Supply	12V DC/PoE (802.3af)
<b>Environment</b>	
Operating Conditions	minus 40 to +60°C (-40°F to +140°F)/less than 95%
Protection Grade	IP67
<b>Structure</b>	
Casing	Metal

5 MP Fixed Bullet camera	
Technical	Specification
<b>Camera</b>	
Image Sensor	½.7"5Megapixel progressive CMOS
Max. Resolution	2592 (H) ×1944 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.005 Lux@F1.6 (Color, 30IRE) 0.0005 Lux@F1.6 (B/W, 30IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	50 m (164.0 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (IR LED)
<b>Lens</b>	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: Horizontal: 98°; vertical: 72°; diagonal: 130° 3.6 mm: Horizontal: 80°; vertical: 59° ; diagonal: 106° 6 mm: Horizontal: 50°; vertical: 36°; diagonal: 64°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 0.9 m (3.0 ft) 3.6 mm: 1.6 m (5.3 ft) 6 mm: 3.2 m (10.5 ft)
<b>Professional, Intelligent</b>	
Perimeter Protection	Tripwire; intrusion (Recognition of human and vehicle)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
<b>Video</b>	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream (2592 × 1944@1–20 fps) (2688 × 1520@1–25/30 fps) sub stream(704 × 576@1–25 fps/704 × 480@1–30 fps) third stream(1280 × 720@1–25/30 fps)
Stream Capability	3 streams
Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR

Video Bit Rate	H.264: 3 Kbps–8192 Kbps H.265: 3 Kbps–8192 Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	YES
HLC	YES
WDR	120db
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Roi)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G726
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; less service time of SD card (smart card supports); network disconnection; IP conflict; illegal access; voltage detection; security exception; motion detection; video tampering; scene changing; intensity change; tripwire; intrusion; SMD
<b>Network</b>	
Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	Ipv4; Ipv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UpnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI;P2P;Milestone;Genetec
Scene Self-adaptation	Yes
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	As per OEM
Mobile Phone	IOS; Android
<b>Ports</b>	
Audio Input	1-channel (RCA port)

Audio Output	1-channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC
<b>Certifications</b>	
Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
<b>Power</b>	
Power Supply	12V DC/PoE (802.3af)
<b>Environment</b>	
Operating Conditions	minus 40 to +60°C (-40°F to +140°F)/less than 95%
Protection Grade	IP67
<b>Structure</b>	
Casing	Metal

5 MP Motorized Bullet camera	
Technical	Specification
<b>Camera</b>	
Image Sensor	½.7" CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.005 lux@F1.5 (Color, 30 IRE) 0.0005 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	60 m (196.85 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)
<b>Lens</b>	
Lens Type	Motorized vari-focal
Mount Type	φ14
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.5
Field of View	Horizontal: 99°–28° Vertical: 71°–21° Diagonal: 134°–35°
Iris Type	Fixed
Close Focus Distance	0.8 m (2.62 ft)
<b>Professional, Intelligent</b>	
IVS (Perimeter Protection)	Tripwire, intrusion (support the classification and accurate detection of vehicle and human)
SMD 3.0	Less false alarm, longer detection distance

Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face snapshot set as face or one-inch photo; 3 snapshot strategies (real-time snapshot, optimization snapshot, and quality priority); face angle filter; optimization time setting
<b>Video</b>	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 2592 × 1944 @ (1–25/30) fps Sub stream 1: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps) Sub stream 2: 1920 × 1080 @ (1–25/30 fps) Sub stream 3: 1280 × 720 @ (1–25/30 fps)
Stream Capability	4 streams
Resolution	5M (2592 × 1944); 4M (2688 × 1520); 3.6M (2560 × 1440); 3M (2048 × 1536); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240); VGA (640 × 480)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	YES
HLC	YES
WDR	120db
Scene Self-adaptation (SSA)	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Rol)	Yes (4 areas)
Defog	Yes
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; less service time of SD card (smart card supports); network disconnection; IP conflict; illegal access; voltage detection; security exception; motion detection; video tampering; scene changing; intensity change; tripwire; intrusion; SMD
<b>Network</b>	
Network	RJ-45 (10/100 Base-T)
SDK and API	Yes



Protocol	Ipv4; Ipv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UpnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI
Scene Self-adaptation	Yes
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	As Per OEM
Mobile Phone	IOS; Android
<b>Ports</b>	
Audio Input	1-channel (RCA port)
Audio Output	1-channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC
<b>Certifications</b>	
Certifications	CE-LVD:EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC:47 CFR FCC Part 15, Subpart B; UL/CUL:UL62368-1 & CAN/CSA C22.2 No. 62368-1-14;
<b>Power</b>	
Power Supply	12V DC/PoE (802.3af)
<b>Environment</b>	
Operating Conditions	minus 40 to +60°C (-40°F to +140°F)/less than 95%
Protection Grade	IP67
<b>Structure</b>	
Casing	Metal

2 MP PTZ camera	
Technical	Specification
<b>Camera</b>	
Image Sensor	½.8" CMOS
Max. Resolution	1920 (H) × 1080 (V), 2 MP
ROM	4 GB
RAM	1 GB
Scanning System	Progressive

Electronic Shutter Speed	1/1s~1/30,000s
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux@F1.6 (IR light on)
Illumination Distance	250 m(820.21 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	6 (IR LED)
<b>Lens</b>	
Focal Length	4.8 mm–154 mm
Max. Aperture	F1.6–F4.0
Angle of View	H: 60.2°–2.7°; V: 34°–1.5°; D: 68°–3°
Optical Zoom	30x
Focus Control	Auto/Manual
Close Focus Distance	0.8 m–5.0 m ( 2.62 ft–16.40 ft)
<b>PTZ</b>	
Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –20° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–260°/s Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 0°/s–300°/s Tilt: 0°/s–200°/s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	Pelco-P/D (Auto recognition)
<b>Intelligence</b>	
Face Detection	Face detection; bounding box; optimization; capturing pictures; uploading high-quality face snapshots; face enhancement. Face attributes: Gender, age, facial expressions (Anger, sad, antipathy, fear, surprise, calm, happy, and confused), face mask, and mustache. Face image and 1 inch photos are supported for face cutouts. Face capture: Real-time snapshot, face priority, and quality priority.
IVS	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; Vehicle/Human Alarm Classification; linkage tracking
SMD	Support
Auto Tracking	Support
<b>Video</b>	
Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG (Sub Stream); Smart H.264+
Stream Capability	3 streams
Resolution	1080p(1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)

Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 64 Kbps–10496 Kbps H265: 25 Kbps–6400 Kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	YES
HLC	YES
DWDR	YES
White Balance	Auto, ATW, Indoor, Outdoor, Manual
WDR	120 dB
Gain Control	Auto/Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detection	Support
Electronic Image Stabilization (EIS)	Support
Region of Interest(Rol)	Support
Defog	Yes
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas
<b>Audio</b>	
Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723
<b>Network</b>	
Network	RJ-45 (10/100 Base-T)
Protocol	FTP; RTMP; Ipv6; Bonjour; Ipv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UpnP; NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; SDK; ONVIF (Profile S&G&T)
Streaming Method	Unicast / Multicast
Max User	20 User
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	As per OEM
Mobile Phone	IOS; Android
<b>Certifications</b>	
Certifications	CE, FCC, BIS
<b>Interface</b>	
Analog Output	1 channel (CVBS output, BNC)
RS-485	1 (baud rate: 1200 bps–9600 bps)
Audio I/O	1 in, 1 out
Alarm I/O	7 in, 2 out
<b>Power</b>	
Power Supply	AC24V/3A(±25%), Hi-PoE
Power Consumption	24W, 38W (IR on)
<b>Environment</b>	
Operating Conditions	minus 40 to +70°C (-40°F to +140°F)/less than 95%

Protection Grade	IP67
Vandal Resistance	IK10
surge protection	TVS 8000V lightning proof
<b>Structure</b>	
Casing	Metal

<b>5 MP Fixed Dome Defog Camera</b>	
<b>Technical</b>	<b>Specification</b>
<b>Camera</b>	
Image Sensor	½.7" CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.005 lux@F1.6 (Color, 30 IRE) 0.0005 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	50 m (164.0 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
<b>Lens</b>	
Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: Horizontal: 102°; Vertical: 71°; Diagonal: 131° 3.6 mm: Horizontal: 84°; Vertical: 58°; Diagonal: 110° 6 mm: Horizontal: 51°; Vertical: 37°; Diagonal: 63°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 0.9 m (2.96 ft) 3.6 mm: 1.6 m (5.25 ft) 6 mm: 3.1 m (10.17 ft)
<b>Smart Event</b>	
IVS	Abandoned object; missing object
Heat Map	Yes
<b>Professional, Intelligent</b>	
IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
SMD 3.0	Less false alarm, longer detection distance
Face Detection	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face snapshot set as face, one-inch photo or custom; 3 snapshot strategies (real-time snapshot, optimization snapshot and quality first); face angle filter; optimization time setting

People Counting	Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/ monthly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
<b>Video</b>	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG(only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 2592 × 1944@(1-20 fps)/2688 × 1520@(1- 25/30 fps) /1920 × 1080@(1-50/60 fps) Sub stream: D1@(1–25/30 fps) Third stream: 1080p@(1–25/30 fps)
Stream Capability	3 streams
Resolution	2688 × 1520; 2304 × 1296; 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–20480 kbps H.265: 3 kbps–20480 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	YES
HLC	YES
WDR	120db
Scene Self-adaptation (SSA)	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Roi)	Yes (4 areas)
Defog	Yes
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas
<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723
<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; SMD; people counting in area; stay detection; people counting; security exception
<b>Network</b>	

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	Ipv4; Ipv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UpnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI
Scene Self-adaptation	Yes
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD Card (support max. 256 G); NAS
Browser	IE: IE8, IE9, IE11 Chrome Firefox
Management Software	As Per OEM
Mobile Phone	IOS; Android
<b>Certifications</b>	
Certifications	CE-LVD: EN60950-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
<b>Power</b>	
Power Supply	12V DC/PoE (802.3af)
<b>Environment</b>	
Operating Conditions	minus 40 to +60°C (-40°F to +140°F)/less than 95%
Protection Grade	IP67
<b>Structure</b>	
Casing	Metal

NVR 32 Channel 8 sata	
Technical	Specification
<b>System</b>	
Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operation Interface	Web; local GUI
<b>AI</b>	
AI by Recorder	Face detection; face recognition; perimeter protection; SMD Plus
AI by Camera	Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat map
<b>Perimeter Protection</b>	
Perimeter Performance AI by Recorder (Number of Channels)	4 channels, 10 IVS rules for each channel

Perimeter Performance of AI by Camera (Number of Channels)	16 channels
<b>Face Detection</b>	
Face Detection Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s each channel)
Face Attributes	6 attributes: Gender; age; glasses; expression; mouth mask; beard
Face Detection Performance of AI by Camera (Number of Channels)	16 channels
<b>Face Recognition</b>	
Face Database Capacity	Up to 20 face databases with 20,000 images, with a total capacity of 2.5 G. Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image.
Face Recognition Performance of AI by Recorder (Number of Channels)	1. 16-channel FD (by camera) + FR (by recorder), image stream: 16 face images/s 2. 2-channel FD (by recorder) + FR (by recorder), video stream: 12 face images/s
Face Recognition Performance of AI by Camera (Number of channels)	16 channels
<b>SMD Plus by Camera</b>	
SMD Plus by Recorder	8 channels: Secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change
SMD Plus by Camera	16 channels
<b>Video Metadata by Camera</b>	
Metadata Performance of AI by Camera (Number of Channels)	8 channels
Human Attributes	Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location.
Non-motor Vehicle Attributes	Vehicle model, vehicle color, number of persons, helmet.
AI Search	Supports searching for target video by metadata
<b>ANPR by Camera</b>	
Performance	8 Channels
License Plate Database Capacity	1. Create up to 20,000 plate numbers. 2. Blocklist and allowlist
<b>Audio and Video</b>	
Access Channel	32
Network Bandwidth	AI disabled: 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing AI enabled: 200 Mbps incoming, 200 Mbps recording and 200 Mbps outgoing
Resolution	32 MP; 24 MP; 16 MP; 12 MP; 8 MP; 5 MP; 4 MP; 1080p; 720p; D1; CIF; QCIF

Decoding Capability	AI disabled: 2-channel 32 MP@20 fps; 2-channel 24 MP@20 fps; 4-channel 16 MP@30 fps; 5-channel 12 MP@30 fps; 8-channel 8 MP@30 fps; 12-channel 5 MP@30 fps; 16-channel 4 MP@30 fps; 32-channel 1080p@30 fps AI enabled: 1-channel 32 MP@20 fps; 1-channel 24 MP@20 fps; 2-channel 16 MP@30 fps; 4-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 8-channel 5 MP@30 fps; 12-channel 4 MP@30 fps; 24-channel 1080p@30 fps
Video Output	2 VGA, 2 HDMI VGA:1920 × 1080, 1280 × 1024, 1280 × 720 HDMI:3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 Simultaneous video source output for VGA1 and HDMI1 Simultaneous video source output for VGA2 and HDMI2
Multi-screen Display	Main screen: ¼/8/9/16/25/36 Sub screen: ¼/8/9/16
Third Party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung
<b>Compression</b>	
Video	Smart H.265+; Smart H.264+; H.265; H.264; MJPEG
Audio	PCM; G.711A; G.711U; G.726
<b>Network</b>	
Network Protocol	HTTP; HTTPS; TCP/IP; Ipv4/Ipv6; UDP; SNMP; NTP; DHCP; DNS; SMTP; UpnP; IP Filter; PPPoE; FTP; DDNS; Alarm Server; IP Search (Supports Dahua IP camera, DVR, NVS, etc.); Multicast; P2P; Auto Registration; iSCSI
Mobile Phone Access	Android; iOS
Interoperability	ONVIF (profile T/S/G); CGI; SDK
Browser	Chrome; IE9 or later; Firefox
<b>Record Playback</b>	
Multi-channel Playback	Up to 16 channels
Record Mode	Manual; schedule (general; MD; alarm; MD & alarm; intelligent; POS)
Storage Method	Local HDD
Backup	USB device and network
Playback Function	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)
<b>Storage</b>	
Disk Group	Yes
RAID	RAID 0/1/5/6/10
<b>Alarm</b>	
General Alarm	Motion detection; privacy masking; video loss; local alarm; PIR alarm; IPC alarm
Anomaly Alarm	Camera offline; storage error; full storage; IP conflict; MAC conflict; login lock; network security anomaly
Intelligent Alarm	Perimeter protection; face detection; face recognition; SMD; video metadata (human; motor-vehicle; non-motor vehicle) ; ANPR; people counting; stereo analysis; crowd distribution; heat map
Alarm Linkage	Record; snapshot; IPC external alarm output; buzzer; log; preset; email



External Port	
Audio Input	1 channel, RCA connector
Audio Output	2 channel, RCA connector, which supports voice intercom output
HDD	8 SATA ports, each disk can contain up to 16 TB
Alarm Input	16 channels
Alarm Output	8 channels
RS-232	1 channel, used to debug and pass through serial data
RS-485	2 (1 port for half-duplex serial communication, 1 port for full-duplex serial communication)
USB	4 (2 front USB 2.0 ports, 2 rear USB 3.0 ports)
HDMI	2
VGA	2
Network	2 (10/100/1000 Mbps Ethernet port, RJ-45)
General Parameter	
Power Supply	Single, 100V–240V AC, 50 Hz–60 Hz
Operating Temperature	minus 10°C to +55°C (+14°F to +131°F)
Certifications	FCC: 47 CFR FCC Part15, SubpartB, Class A CE-EMC: EN 55032: 2015+A1: 2020; EN IEC 61000-3-2: 2019+A1: 2021; EN 61000-3-3: 2013+A1: 2019+A2: 2021; EN 55035: 2017+A11: 2020; EN 50130-4: 2011+A1: 2014 CE-LVD: EN 62368-1: 2014, UL: UL 62368-1, 2 <sup>nd</sup> Ed, BIS

43 Inch Display	
Technical specification	
Display	
Screen Size	43"
Aspect Ratio	16:09
Resolution	3840×2160 (UHD)
Backlight	LED
Brightness/Luminance	300cd/m <sup>2</sup>
Contrast Ratio	4000:1
Display Color	1.07B
Viewing Angle(H/V)	178°(H)/178°(V)
Response Time	9.5ms
Refresh Rate	60Hz
Signals	
Input	HDMI ×3, USB ×1
Output	Speaker×2 6W ,Earphon×1
General	
Power Supply	AC100~240V
Certifications	
Certifications	CE/FCC

8-Port Gigabit Ethernet PoE/PoE+ Unmanaged Switch	
Speed	10/100/1000Mbps Gigabit Ethernet
Number of POE+ Ports	8
PoE Budget/PSU 802.3at	120W
Power Supply Supported	External Input 54V 2.4A (130W) Input 54V 1.66A(90W) Input 54V 1.25A(67.5W)
Switch Housing	Metal
Form-Factor	Desktop, wall & rack mount
LEDs	Power, Link/Activity
Fan	Fanless
Short Cable Power Saving	No
Energy Efficient Ethernet Support (IEEE 802.3az)	Yes
Jumbo Frame Support	Yes
MAC Table Size	4K
Packet Buffer Size	192KB
Bandwidth	16Gbps
Energy Efficient Ethernet	IEEE 802.3az complaint
Mean Time Between Failures (MTBF)	2,752,476 hours
IEEE 802.1p COS	Yes
DSCP	Yes
Queue WRR Ratio	1:3:5:7:8:10:12:15 Weighted Fair Queue (WFQ)
DC Power Adapter	Input 54V 2.4A (130W) External
Max Power Consumption (Watts)	130W
Acoustic Noise Level @ 25° C (dBA)	0 dBA (Fanless)
Operating Temperature	0° to 40°C (32° to 104°F)
Electromagnetic compliance (A or B)	Class A
Dimensions (W x D x H)	9.29 x 4.02 x 1.06 in
Weight	0.6 kg (1.32 lb)
Certifications	47 CFR FCC Part 15, SubpartB, Class A ICES-003:2016 Issue 6, Class A ANSI C63.4:2014
	55032:2012+AC:2013, Class A EN 55024:2010 EN 61000-3-2:2014, Class A EN 61000-3-3:2013
	AS/NZS CISPR 32:2015, Class A
	VCCI-CISPR 32:2016, Class A
	CNS 13438
SAFETY Certifications	CB. IEC 60950-1:2005(ed.2) + A1:2009 + A2:2013
	UL/cUL Listed; UL60950-1, 2 <sup>nd</sup> Ed. 2014; CAN/CSA C22.2 No. 60950-1-07, 2 <sup>nd</sup> Ed. 2014
	EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
	AS/NZS 60950.1:2015

Warranty and Support	Lifetime Hardware Warranty
	90 Day's Free remote configuration support

8-port 10/100/1000 Base-T PoE Smart managed switch with 2 Fiber Uplinks	
Physical Interface	8 # 10/100/1000 Mbps Base-T auto-sensing PoE+ ports
	2 # 1000 Base-x SFP uplink ports
	500MHz single core CPU or higher
	128MB RAM, 32MB SPI FLASH
Performance	Packet buffer memory min. 512K
	Bandwidth: 20 Gbps full duplex
	Priority queues 8
	Address database size: 8k media access control (MAC)
	256 Multicast groups
	32 Number of Ipv4 static routes
	64 VLANs
	256 Number of DHCP snooping bindings
	11.9 Mpps Packet forwarding rate
	Up to 10K Jumbo frames
	Acoustic noise level @ 25° C 0 dBA (fanless)
	8 PoE+ ports with 55W budget
Network Protocol and Standards	IEEE 802.1Q static VLAN (64 groups, static)
	VLAN Tagging
	Protocol-based VLANs
	MAC-based VLANs
Other Requirements	Auto-VoIP VLAN / Auto-Voice VLAN
	Broadcast, multicast, unknown unicast , storm control
	Protected ports
	Port-based QoS
	prioritization on power
	Dynamic Power allocation
	DSCP-based QoS
	PoE timer
	PoE scheduling/timers
	Web-based configuration
	Remote/ Cloud manageability
	Password access control
	Multi-site, multi-network single pane-of-glass view
	TACACS+ and RADIUS support
	Firmware upgradeable through cloud
Environmental Specifications	54V 1.25A external power adapter
	Operating temperature: 0° to 40°
	Storage temperature: -20° to 70°C
	Operating humidity: 90% maximum relative humidity, non-condensing
	Mean time between failures (MTBF): 1,200,041 hrs (137 yrs)
	Acoustic noise: 0 dB
	Storage humidity: 95% maximum relative humidity, non-condensing

<b>Certifications</b>	CE mark, commercial
	FCC Part 15 Class B
	VCCI Class B
	C-Tick
	EN 55024
	cUL IEC 950/EN 60950
	CB
<b>Status LEDs</b>	Per RJ45 port: Link/activity, speed, PoE status
	Per SFP port: Link/speed
	Per device: Power, PoE Max
<b>Warranty and Support</b>	Lifetime hardware replacement warranty
	Lifetime free latest firmware support
	Replacement with New Product Only No refurbished Products.

<b>8-port 10/100/1000 Base-T PoE+ Managed Switch with Fiber Uplinks</b>	
<b>Physical Interface</b>	8 # 10/100/1000 Mbps Base-T auto-sensing PoE+ (190W) ports
	2 # 1000 Base-X SFP uplink ports
	Rackmount through Rack-mount kit
	Internal Power Supply
	CPU:400 MHz Cortex-A9 Single Core
	512MB RAM
	16MB SPI + 256MB NAND FLASH
<b>Network Protocol and Standards</b>	IEEE 802.3af/at (Power over Ethernet Plus)
	IEEE 802.3ad Link Aggregation (manual or LACP)
	IEEE 802.1D Spanning Tree Protocol (STP),RSTP,MSTP
	IEEE 802.1p Class of Service (CoS)
	IEEE 802.1Q static VLAN
	PoE Timer on port
	PoE Power Management
<b>Performance</b>	Bandwidth: 20 Gbps full duplex
	Buffer memory: 1.5 MB
	Address database size: 16k media access control (MAC)
	Mean time between failures (MTBF): 1,509,979 hours
	IEEE 802.1Q static VLAN (64 groups, static)
	Multicast groups : 512
	Number of Ipv4/Ipv6 static routes: 32/32
	Port-based QoS
	Number of VLANs: 256
	Number of ARP cache entries:479 ARP / 223 NDP
	Number of DHCP snooping bindings: 8K
	Access Control Lists (ACLs): 100 shared for MAC, IP and Ipv6 ACLs
	Packet forwarding rate 64 Bytes: 14.88 Mpps
<b>Other Requirements</b>	DSCP-based QoS
	Jumbo frame support: Upto 9k
	Acoustic noise level @ 25°C: 32 dBA
	SNMP v1, v2c, v3

	RMON group 1, 2, 3, 9
	RFC 2131 DHCP client
	Voice VLAN,Auto-VOIP
	Auto denial-of-service (DoS) protection
	Power saving when link down
	IEEE 802.1x with Guest VLAN
	IEEE 802.1Q VLAN tagging
	Port-based security by locked MAC addresses
	Storm control for broadcast, multicast and unknown unicast packets
	Number of IP VLAN interfaces (routed VLANs): 15
	Dual software (firmware) image
	TACACS+ and RADIUS support
	TLS Web-based access (version): V1.0
<b>Power Specification</b>	PoE budget: PoE+ (190W)
	Max Power consumption: 225 W
	Heat Dissipation: 768.15 BTU/hr
	100-240VAC/50-60-Hz universal input
	Web-based configuration
	multi-switch management software
<b>Environmental Specifications</b>	Operating temperature: 0° to 50°C
	Storage temperature: -(-20° to 70° C)
	Operating humidity: 90% maximum relative humidity, non-condensing
	Altitude 10,000ft (3,000m) maximum
	Storage humidity: 95% maximum relative humidity, non-condensing
<b>Certifications</b>	CE EN 55022, EN 61000 and EN 55024
	IEC 60950-1:2005 (ed.2)+A1:2009+A2:2013
	FCC Part 15 Class A, VCCI Class A
	AN/NZS CISPR 22:2009+A1:2010 CLASS A
	C-Tick, UL/cUL 60950-1
<b>Warranty and Support</b>	Lifetime hardware replacement warranty
	Lifetime free latest firmware support
	Replacement with New Product Only No refurbished Products.

<b>24-port 10/100/1000 Base-T Gigabit PoE+ Managed Switch</b>	
<b>Physical Specifications</b>	24 # 10/100/1000 Base-T auto-sensing PoE+ ports
	2 dedicated 100/1000 Base-X Fiber SFP ports
<b>Performance Specification</b>	Bandwidth: 52 Gbps non-blocking
	Mean Time Between Failures (MTBF): 1,051,375 hours (120 yrs)
	Heat Dissipation (worst case, all ports used, full PoE, line-rate traffic) (BTU/hr): 780.20 BTU/hr
	Forwarding modes: Store-and-forward
	8 Priority queues
	Weighted Round Robin (WRR) and Strict Priority
	MAC Address database size: 8,000 media access control (MAC) addresses
	VLAN: 64

	128 Multicast groups
	Number of DHCP snooping bindings: 256
	Access Control Lists (ACLs): 100 shared for MAC, IP and Ipv6 ACLs (ingress)
	Packet forwarding rate (64 byte packet size) (Mpps) : 38.6
	Jumbo frame support: Up to 9K packet size
	Packet buffer memory (Dynamically shared across only used ports): 0.5 MB
	1G Copper Latency(64-byte packets): 3.749µs
	1G Fiber Latency (64-byte packets): 3.129µs
	Max power (worst case, all ports used, full PoE, line-rate traffic) (Watts): 228.53 W
	Auto Power Down
	PoE budget: 190W
<b>IEEE Network Protocols</b>	IEEE 802.3 Ethernet
	IEEE 802.3u 100BASE-T
	IEEE 802.1Q VLAN Tagging
	IEEE 802.3ab 1000BASE-T
	IEEE 802.3af PoE
	IEEE 802.3at PoE+
	IEEE 802.3az Energy Efficient Ethernet (EEE)
	IEEE 802.3ad Trunking (LACP)
	IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX
	IEEE 802.3x Full-Duplex Flow Control
	IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED)
	IEEE 802.1p Class of Service
	IEEE 802.1D Spanning Tree (STP)
	IEEE 802.1s Multiple Spanning Tree (MSTP)
	IEEE 802.1w Rapid Spanning Tree (RSTP)
	IEEE 802.1X Radius network access control
<b>Network Security and Traffic</b>	IEEE 802.1x
	Guest VLAN
	RADIUS-based VLAN assignment via .1x
	RADIUS accounting
	Network Storm Protection
	DoS attacks prevention
	Broadcast, Unicast, Multicast Protection
	Access Control Lists (ACLs) L2 / L3 / L4
	IP-based ACLs (Ipv4 and Ipv6)
	MAC-based ACL
	TCP/UDP-based ACL
	MAC lockdown
	MAC lockdown by the number of MACs
	IEEE 802.1x Radius Port Access Authentication
	Control MAC # Dynamic learned entries: 600
	Control MAC # Static entries :20
<b>L2 Services</b>	IEEE 802.1Q VLAN Tagging
	Video VLAN

	Voice VLAN
	IEEE 802.3ad – LAGs – LACP ( (8 LAGS with max. of 8 members in each LAG))
	Broadcast Storm Control
	IGMP Snooping (v1, v2 and v3)
	IGMP Snooping queriers
<b>Network Monitoring and Discovery Services</b>	802.1ab LLDP
	SNMP V1, V2, V3
	RMON 1,2,3,9
<b>Quality of Service (QoS)</b>	Port-based rate limiting
	Port-based QoS
	DiffServ QoS
	IEEE 802.1p COS
	Ipv4 DSCP
	Diff Serv QoS
	Ipv4 ToS
<b>Management</b>	Cloud/Remote management
	Password management
	Configurable Management VLAN
	Admin access control via Radius and TACACS+
	Web-based graphical user interface (GUI)
	Ipv6 management
	Dual Software (firmware) image
	Dual Configuration file
	SNTP client over UDP port 123
	SNMP v1/v2
	SNMP v3 with multiple IP addresses
	RMON 1,2,3,9
	Port Mirroring
	Many to One Port Mirroring
	Cable Test utility
	SSL/HTTPS and TLS v1.0 for web-based access
	TFTP/HTTP File transfers (uploads, downloads)
	HTTP Download (firmware)
	Syslog (RFC 3164)
<b>LEDs</b>	Per port: Speed, Link, Activity
	Per device: Power, Fan and PoE Power Status
<b>Environmental Conditions</b>	Operating Temperature: 32° to 122°F (0° to 50°C)
	Operating Humidity: 95% maximum relative humidity, non-condensing
	Storage Temperature: – 4° to 158°F (–20° to 70°C)
	Storage Humidity: 95% maximum relative humidity, non-condensing
	Operating Altitude : 10,000ft (3,000m) maximum
<b>Certifications</b>	CE mark, commercial
	FCC Part 15 Class A, VCCI Class A
	Class A EN 55022 (CISPR 22) Class A
	Class A C-Tick

	EN 50082-1
	47 CFR FCC Part 15, SubpartB, Class A
	CCC
<b>Safety</b>	UL listed (UL 1950)/cUL IEC 950/EN 60950
	CB report / certificate IEC 60950-1:2005 (ed.2)+A1:2009+A2:2013
	CE LVD: EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
	BSMI: CNS 14336-1
<b>Warranty and Support</b>	True Lifetime hardware replacement warranty
	Lifetime free latest firmware support
	Replacement with New Product Only No refurbished Products.

UTP CAT6 Cable	
Technical	Specification
<b>Conductor</b>	
Material	Oxygen free copper (99.97% purity)
Diameter	0.53 mm $\pm$ 0.01 mm
<b>Insulation</b>	
Material	HDPE
Min. Average Thickness	0.21 mm
Diameter	0.95 mm $\pm$ 0.1 mm
Color (4 Pairs)	Blue, white/blue; orange, white/orange; green, white/green; brown, white/brown
<b>Separator</b>	
Material	PE
Specification	Translucent 4.5 $\times$ 0.4 mm
<b>Rip Cord</b>	
Material	Polyester
Specification	500D
<b>Sheath</b>	
Material	PVC
Min. Average Thickness	0.5 mm
Diameter	6.0 mm $\pm$ 0.3 mm
Color	Blue
<b>Electrical</b>	
Max. DC Resistance of a Single Conductor	8.7 $\Omega$ /100 m
Min. Insulation Resistance	5000M $\Omega$ ·km
Max. DC Resistance Unbalance	2% (pair intra), 4% (pairs inter)
Dielectric Strength	No breakdown with 1KV DC for 1 min
<b>Transmission</b>	
Characteristic Impedance	100 $\pm$ 15 $\Omega$
Near End Cross Talk	$\geq$ 39.30 dB/100 m@250 MHz
Max. Attenuation	34.8 dB/100 m@250 MHz
Return Loss	$\geq$ 17.3 dB/100 m@250 MHz
<b>Security</b>	



Vertical Fire Propagation Test	Comply with IEC 60332-1-2
<b>Compliance</b>	
Executive Standards	Q/DXJ 067-2019, EN50575-2014
<b>Certification</b>	
Certification	CPR Eca
Cable Length	305.0 m (1000.66 ft) ± 1.5 m (4.92 ft)

<b>100/1000Base-T to 1000Base-LX SC Single-mode Media Converter (10 km)</b>	
Interfaces	One 10/100/1000Base-T port
	One 1000Base-LX SC port
LEDs	PWR
	Link/Act (SC)
	Link/Act (RJ-45)
Standards and Functions	IEEE 802.3 10Base-T
	IEEE 802.3u 100Base-TX
	IEEE 802.3ab 1000Base-T
	IEEE 802.3z 1000Base-LX
	IEEE 802.3x Flow Control in full-duplex mode
	Auto MDI/MDIX adjustment for copper port
	Link Fault Pass-through support for link status control
Maximum Packet Size	16 KB
Dimensions (L x W x H)	70.5 x 93.5 x 26 mm
Weight	124 g
Power Supply	5 V DC, 0.55 A power adapter
Max. Power Consumption	1.65 W
Wavelength	1310 nm
Length of Supported Fiber Optic Cable	Up to 10 km
Temperature	Operating: 0 to 55 °C
	Storage: -25 to 70 °C
Humidity	20% to 80% non-condensing

<b>CAT6 CONNECTOR</b>	
RJ45 Jack Housing & Insert	Polycarbonate
RJ45 Jack Shield	Bronze with Nickel plating
RJ45 Jack Contact Terminal Material	Phosphor bronze with 100 micro-inch nickel plating on contact area
RJ45 Jack Contact Terminal Finish	50 micro-inch gold plating
Insertion Cycles	2000 times
Operating Temperature	-40 °C to 125°C
Current Rating (MAX)	2A
AC Input	250V AC
Insulation Resistance	>500 Megaohms, 1000V DC/min
Contact Resistance	<20 Milliohms

2.4Ghz elevator wireless bridge	
Technical	Specification
<b>Hardware</b>	
Function Slots	2
Power Supply	Passive PoE
Power Consumption	5 W
WAN Port	1 × 10/100 Mbps RJ-45 port
Indicator Light	1 × system indicator; 1 × WAN port indicator; 1 × LAN port indicator; 1 × Wi-Fi indicator
External Port	1 × LAN port (RJ-45); 1 × WAN port (RJ-45)
Wireless Standard	IEEE802.11b/g/n
<b>Performance</b>	
Operating Frequency	2.412 GHz–2.484 GHz
Terminal Communication Protocol	TCP/IP protocol
Air Interface Rate	300 Mbps
Max. Output Power	20 dBm ± 2 dBm
Antenna	Built-in antenna
Antenna Gain	8 dBi
Antenna Direction Angle	Horizontal: 60°; vertical: 60°
Polarization	Horizontal/vertical dual polarization
Cross-polarization Isolation	23 dBi
Max. VSWR	<1.5
Transmission Distance	1 km (3280.84 ft)
Optimal Transmission Distance	300 m (984.25 ft)
Network Mode	Bridge mode
Operating Mode	Access point mode; repeater mode
Channel	1–13
Device Type	802.11b/g/n
Channel Width	20 MHz; 40 MHz
Standard TX Power	20 dBm
Protection	IP65
<b>Function</b>	
WAN Port Connection Mode	Ethernet port
Encryption Mode	WPA2
Management and Log	AC; Syslog; NTP; Telnet
Firmware Update	Web update
Wireless Certification	WPA2
Security Mechanism	Password
Network Protocol	UDP; HTTPS; Ipv4; DNS; TCP/IP; HTTP; NTP; DHCP
DHCP Server	Yes
<b>General</b>	
Operating Temperature	–30 °C to +55 °C (–22 °F to +131 °F)
Operating Humidity	5%–95% (RH)

Memory	64 MB
Statics Protection	±6 kV
Lighting Protection	±2 kV

3.5" SURVEILLANCE HDD	
Technical	Specification
Formatted capacity	10TB
Form factor	3.5-inch
Advanced Format (AF)	Yes
Recording technology	CMR
RoHS compliant	Yes
Product Features	
Cameras supported	Up to 64 HD
AI streams	32
Firmware feature name	AllFrame AI
Tarnish resistant components	Yes
Performance	
Interface transfer rate (max) – Buffer to host	6 Gb/s
Interface transfer rate (max) – Host to/from drive (sustained)	265 MB/s
Cache (MB)	256
RPM	7200
Reliability/Data Entegrity	
Load/unload cycles	6,00,000
Annualized workload rating	Up to 550 TB/year
Non-recoverable read errors per bits read	<1 in 10 <sup>15</sup>
MTBF	20,00,000
Limited Warranty (years)	5
Power Management – Average power requirements (W)	
Read/write	9
Idle	8
Standby and sleep	0.5
Environmental specifications	
Temperature – Operating	0°C to 65°C
Temperature – Non-operating	-40°C to 70°C
Shock (Gs) – Operating	70
Shock (Gs) – Non-operating	250
Acoustics (dBA) – Idle	34
Acoustics (dBA) – Seek (average)	38
Physical Dimensions	
Height (in/mm, max)	1.028/26.1
Length (in/mm, max)	5.787/147
Width (in/mm, ± .01in)	4/101.6
Weight (lb/kg, ± 3%)	1.65/0.75

1 KVA Line Interactive UPS Specification	
Output Capacity (KVA )	1 Kva
Output Capacity (KW )	0.6 Kw
Output Phase	1 Phase
Output Voltage	230 Phase
Output Frequency (sync to mains)	45 – 55 Hz
Technology	Line Interactive
Output Waveform type	Stepped approximation to a sinewave
Output Connections	3-Pin 6A Indian Socket
Input Voltage	230 Volt
Input Phase	1 Phase
Input frequency Range	45 – 55 Hz
Input Connections	India 3 Pin 6 Amp
Battery Type Compatibility	Sealed Maintenance Free (SMF) / Valve Regulated Lead Acid (VRLA) type, Flooded / tubular / vented type
Batteries Recharge Time upto 90%	6 Hrs.
Control panel	LED status display
Audible Alarm	Audible and visible alarms prioritized by severity
Maximum Height	180 Mm
Maximum Width	368 Mm
Maximum Depth	140 Mm
Net Weight	14 Kg
Operating Temperature	0 – 40 °C
Operating Relative Humidity	0 – 95 %
Storage Temperature	-15 – 45 °C
Storage Relative Humidity	0 – 95 %
Audible noise at 1 meter from surface of unit	45 Decibel

## 2.4 Other Requirements

- The solution must have centralized application and database.
- All the CCTV Camera should be visible from the central console. The console should indicate the status of each and every CCTV Cameras with latest images/footages.
- The solution should have capability to integrate with other surveillance systems of different brands with the objective of enhancing safety & security in the Arilo Dairy Campus.
- OMFED will provide the necessary infrastructure support for device installation at the specified locations and to connect through OMFED intranet and internet.
- The solution proposed should work with connectivity from any operator. It would be the responsibility of the vendor to configure/tune the device to operate and interchange the data. The non-performance of devices due to network issue will not be considered unless it is genuine.
- At the respective sites, OMFED will provide the space for mounting the devices.

### 3. Delivery period and Milestone

The vendor shall complete the Implementation and configuration of the CCTV Surveillance System as well as achieve “Go-Live” for Arilo Dairy, OMFED within a timeframe as mentioned below from the date of issue of LoA.

Sl. No.	Milestone	Time for Completion (in Weeks)
1.	Project Start	T= Date of Agreement
2.	H/W Installation	T+2
3.	System testing and validation	T+3
4.	Go-Live of CCTV in Arilo Dairy	T+4

**Note** – The above schedule is indicative. The detailed time schedule for Arilo Dairy, OMFED shall be finalized in joint consultation between the Vendor and OMFED. However, the overall timeline of achievement of “Go-Live” for CCTV Surveillance System as mentioned above shall remain fixed.

### 4. Payment terms

The place of payment shall be Head Office, OMFED. Invoices shall be placed to, IT Division for verification & processing.

### 5. Price Revision

No price revision shall be applicable throughout the Delivery Period and the contract period.

### 6. Taxes & Duties

#### 6.1 Indirect Taxes

A) The Service Provider agrees to and, hereby accepts full and exclusive liability for payment of any and all taxes, duties, charges and levies as per the Applicable Laws as applicable for the Scope of Supply in accordance with the provisions of this Service Order / Agreement. In case it is increased or decreased under any statute, rules, regulations, notifications, etc. of any Authority, the impact shall be to the account of OMFED subject to submission of documentary evidence to the satisfaction of OMFED.

B) In case any fresh tax is imposed by any Authority under any Applicable Law during the Contract Period, the Service Provider shall deposit the same to the appropriate Authority which shall be reimbursed by OMFED on actuals and upon submission of documents evidencing such payment.

C) Obligations relating to Goods and Services Tax (GST)

- i. The Service Provider should have registration under GST Acts.
- ii. The Service Provider has to raise Invoice as required under section 31 of the GST Act and relevant Rules made there under.
- iii. The Invoice should contain the particulars as required under Rule 46 of CGST Rules.
- iv. The Service Provider should file the GST Returns as required in the GST Acts, and details of Invoice submitted to OMFED and GST amount charged thereon should reflect in Form GSTR-2B within a reasonable time, so as to make OMFED enable to take Input Tax Credit (ITC) of the GST amount paid against those invoices.
- v. If due to any reason attributable to the Service Provider, input credit of the GST amount

paid on Invoices raised by the Service Provider is not available to OMFED/denied by the department then the same will be recovered from the payments of the Service Provider or the Service Provider has to deposit an equivalent amount.

- vi. The Service Provider has to comply with all the Provisions of GST Acts, Rules and Notifications issued there under.
- vii. The Service Provider will comply with the “Anti profiteering Measure” as required under Section 171 of the CGST Act.
- viii. The Service Provider hereby undertakes to indemnify OMFED, from any liabilities arising in future due to noncompliance by the Service Provider of the GST Acts, Rules and any other Acts currently in force and applicable to the Service Provider in relation to the job assigned to the Service Provider by OMFED.

## **6.2 Direct Taxes**

TDS as applicable shall be deducted under Income Tax Act,1961 and certificate of deduction shall be provided by OMFED to the Service Provider in accordance with the provisions of Income Tax Act,1961.

## **7. Liquidated Damages**

- 7.1 If the Service Provider fails to achieve the Go-Live of the CCTV Surveillance System within the corresponding Delivery Period and any extension thereof, unless such, unless such failure is due to force majeure situation or due to OMFED’s default, liquidated damages (LD) shall be imposed by OMFED on the Service Provider. However, imposition of LD shall be without prejudice to the other remedies available to OMFED under the terms of the Service Order / Agreement.
- 7.2 In case of delay in achievement of Go-Live of the CCTV Surveillance System, the LD shall be calculated as 2% (two per cent) of the total value of CCTV Surveillance System (excluding GST) for each month or part thereof of delay, subject to a maximum value of 10% of the value of CCTV Surveillance System (excluding GST). GST on LD shall be recovered in addition to the LD amount.
- 7.3 The delivery period shall start from the date of acceptance of the Service Order / Agreement or seven days from the date of issue of Service Order / Agreement, whichever is earlier.
- 7.4 OMFED shall have full liberty to realize the LD through the following ways:
  - a. Appropriation of the Performance Security; OR
  - b. Appropriation the of EMD (in case provision of Performance Security does not exist); OR
  - c. Reduction of the invoice/document value and release of the payment accordingly.
- 7.5 Any waiver of LD shall be at the sole option of OMFED only and any extension must be in writing and with the approval of the competent authority of OMFED.
- 7.6 If at any time during the Service Order / Agreement, the Service Provider encounters conditions that may impact the timely performance of services, the Service Provider shall promptly notify to OMFED in writing of the fact of the delay, it’s likely duration and its cause(s). As soon as practicable after receipt of the Service Provider’s notice, OMFED shall evaluate the situation and may at its discretion waive the LD on the request of the Service Provider.

## **8. Others**

The vendor shall carry out all support related services for the CCTV Surveillance System on a real-time basis for a period of 03 (Three) years as part of warranty starting from the date of achievement of “Go-Live”.

## **Annexure 2A: Proforma of the Agreement to be Signed between OMFED and the Service Provider**

Ref: [\_\_\_\_\_]

This Agreement (hereinafter called the “Agreement”) is made on this [\_\_] day of the month of [month], [year].

BETWEEN

The Orissa State Cooperative Milk Producers’ Federation Limited and having its head office at D-2, Saheed Nagar, Bhubaneswar-751007 (hereinafter referred to as “OMFED”, which expression shall, unless repugnant to or inconsistent with the context, mean and include its successors and assigns) of the first part.

AND

M/s. [\_\_\_\_\_], a company incorporated under the provisions of the Companies Act, 1956/2013 or a registered partnership firm under the provisions of the Indian Partnership Act, 1932 or a LLP firm registered under LLP Act, 2008 and having its registered office at [\_\_\_\_\_] (hereinafter referred to as the “Service Provider” which expression shall unless repugnant to or inconsistent with the context, mean and include its successors and assigns) of the other part.

WHEREAS

- i) the Service Provider, in the ordinary course of its business, is engaged in providing [\_\_\_\_\_] services to its clients, and have represented to OMFED through their bid(s), against Bid Document No. [\_\_\_\_\_] dated [\_\_/\_\_/\_\_] (hereinafter called the “Tender”) for the Procurement of Services – [\_\_\_\_\_];
- ii) on the basis of the said Tender, OMFED has adjudged the Service Provider as a successful Bidder and issued Letter of Award (LoA) No. [\_\_\_\_\_] dated [\_\_/\_\_/\_\_] for the same;
- iii) the Service Provider has agreed through their letter of acknowledgement vide letter No. [\_\_\_\_\_] dated [\_\_/\_\_/\_\_] to perform and undertake the scope of work as described in the Tender;
- iv) the Service Provider is being engaged to provide the required services on the terms and conditions set forth in this Agreement;

NOW THEREFORE THE PARTIES hereby agree as follows:

1. The mutual rights and obligations of the Service Provider and OMFED shall be as set forth in this Agreement, in particular:
  - (a) The Service Provider shall provide out the services in accordance with the provisions of

this Agreement; and

- (b) OMFED shall make payments to the Service Provider in accordance with the provisions of this Agreement.

## 2. Conditions of Contract

- (a) Contract Period: <include relevant clauses from SCC>
- (b) Payment Terms: <include details related to the final quoted /negotiated prices>
- (c) <Other important terms and conditions may be included>
- (d) The Agreement shall be governed by the laws of India and the courts of Bhubaneswar shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with this Agreement
- (e) This Agreement has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Agreement
- (f) All the terms and conditions as per the Bid Document No. [\_\_\_\_] dated [\_\_/\_\_/\_\_] (including the General Conditions of Contract and Special Conditions of Contract) shall be applicable for this Agreement

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective authorized representatives on the day and year first before written.

For and on behalf of OMFED (Authorized Representative) Name: Designation: OMFED D-2, Saheed Nagar, Bhubaneswar-751007	For and on behalf of M/s. (Authorized Signatory) Name: Designation: Name of the Service Provider: Address:
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In presence of the following witnesses

Name: Designation: OMFED D-2, Saheed Nagar, Bhubaneswar-751007	Name: Designation: Name of the Service Provider: Address:
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### **Annexure 3: Price Bid Format**

Sl. No.	Items	Quantity	UOM	Basic Rate per each in figures (₹)	GST %	Unit Price after GST (3+4) (₹)	Total Price (1*5) (₹)
		1	2	3	4	5	6
1.	5 MP Dome Camera	33	Nos.				
2.	5 MP Bullet Camera	21	Nos.				
3.	5 MP Bullet Motorized Vari-focal Camera	1	Nos.				
4.	2 MP PTZ Camera 200 Mtr	4	Nos.				
5.	5 MP Dome Defog Camera	1	Nos.				
6.	NVR 32CH 16 SATA	3	Nos.				
7.	43" LED Monitor	2	Nos.				
8.	8-Port Gigabit Ethernet PoE/PoE+ Unmanaged Switch	10	Nos.				
9.	8-port 10/100/1000 Base-T PoE Smart managed switch with 2 Fiber Uplinks	5	Nos.				
10.	8-port 10/100/1000 Base-T PoE+ Managed Switch with Fiber Uplinks	4	Nos.				
11.	24-port 10/100/1000 Base-T Gigabit PoE+ Managed Switch	2	Nos.				
12.	2.4Ghz elevator wireless bridge						
13.	CAT6 Cable Outdoor	2	Bundle				
14.	Media Converter Giga	10	Nos.				
15.	OFC Splicing	24	Job				
16.	Fiber Connectors	20	Nos.				
17.	RJ45 Connector Industrial Grade	300	Nos.				
18.	OFC Box	20	Nos.				
19.	Electrical Accessories (Where electrical connection will be required)	As per actual					
20.	Camera Pole Mounting Box	10	Nos.				
21.	Camera Mounting Box	55	Nos.				
22.	Surveillance HDD 10TB	8	Nos.				
23.	1 KVA UPS	10	Nos.				
24.	Installation, Configuration, Testing, Commissioning of 60 CCTV Cameras	1	Job				
	<b>GRAND TOTAL (1-24)</b>						

**Note: Grand total of (1-24) shall be considered for the decision of L-1 bidder**

Signature of the Bidder with seal

#### **Annexure 4: Declaration by the Bidder**

**(to be executed on INR 100 non judicial stamp paper and to be duly notarized)**

Date: \_\_\_\_\_

Sub: Tender No. \_\_\_\_\_

In response to the Tender Document above stated, I/We hereby declare and solemnly swear that our Company/ firm \_\_\_\_\_ is not banned/blacklisted as on date by any competent court of Law, forum or any State Government or Central Government or their agencies or by any statutory entities or any PSUs.

AND, if at any stage the declaration/statement on oath is found to be false in part or otherwise, then without prejudice to any other action that may be taken, I/We, hereby agree to be treated as a disqualified Bidder for the ongoing Contract.

In addition to the disqualification our concern/entity may be banned/blacklisted.

AND, that I/We, shall have no right whatsoever, to claim for consideration of my/our bid at any stage and the money deposited in the form of EMD shall be liable for forfeiture in full, and the tender, if any to the extent accepted may be cancelled.

Signature of the Deponent

(Authorized signatory of the Bidder with Seal)

Date:

Place:

## **Annexure 5: Check-list for the Techno-Commercial Bid**

**(to be enclosed with the Techno-Commercial Bid)**

1. Name of the Bidder, Postal address & Registered Office:
2. Type of organization:
3. Contact name & designation of the Authorized Signatory of the Bidder & contact number:
4. Official email, phone, fax:
5. Official website:

<b>Sl. No.</b>	<b>Qualification Requirement</b>	<b>Complied</b>	<b>Documents</b>
1.	Bidder's Experience – Documents in support of meeting Technical Criteria (Refer Chapter 5 and Clause 5.1)		
2.	Bidder's Experience – Documents in support of meeting Financial Criteria (Refer Chapter 5 and Clause 5.2)		
3.	Average Turn Over Certificate of Last 03 Years (Refer Chapter 5, Point – 5.2)		
4.	OEM Turn Over Copies duly self-attested (Refer Chapter 5, Point – 5.2.1)		
5.	Incorporation related documents (Refer Chapter 5, Point – 5.3.1)		
6.	Copy of PAN & GST Registration (Refer Chapter 5, Point – 5.3.2)		
7.	Declaration by the Bidder – Annexure 4		
8.	Proof of payment of Tender Paper Fee (Refer Chapter 5, Point – 5.3.4)		
9.	Proof of payment of EMD/ documents related- to exemption from the same (Refer Chapter 5, Point – 5.3.4)		
10.	Self-Attested Copy of Functional office (Refer Chapter 5, Point – 5.3.6)		
11.	Self-Attested copy of Service Center details (Refer Chapter 5, Point – 5.3.7)		
12.	Copy of OEM Authorization Certificate (Refer Chapter 5, Point – 5.3.8)		
13.	Quality Report of Products (Refer Chapter 5, Point – 5.3.9)		
14.	Copy of Compliance sheet approved by OEM / Local office of OEM		

	(Refer Chapter 5, Point – 5.3.10)		
15.	Copies of supporting documents from OEM related to warranty of products (Refer Chapter 5, Point – 5.3.11)		
16.	Copy of supporting documents showing presence of OEM in India for atleast 5 years (Refer Chapter 5, Point – 5.3.12)		
17.	Copies of OEM Certifications (Refer Chapter 5, Point – 5.3.15)		
18.	Signed Copy of Tender Document (Each & Every page to be sealed & signed)		
19.	Signed copy of check list with seal – Annexure 5		
20.	Bank details – Annexure 6		
21.	Pre Bid Queries- Annexure 9		

Date

Signature of the Authorized Signatory of the Bidder with Seal

## **Annexure 6: Mandate Form - on the letterhead of the Bidder**

To

The Orissa State Cooperative Milk Producers' Federation Limited (OMFED)  
D-2, Saheed Nagar, Bhubaneswar  
Odisha – 751007

**Sub: Mandate for payment through electronic mode i.e. EFT/NEFT/RTGS**

Dear Sir,

We are here by giving our consent to get all our payments due from OMFED through electronic mode i.e. EFT/NEFT/RTGS. We also agree to bear all the bank charges payable in this regard.

**(Please furnish the information in capital letter)**

1. Name of the Bidder
2. Address of the Bidder

PIN Code			
IT PAN			
e-mail Id		Mobile No	
Phone			

3. Bank Particulars

Bank Name					
Branch Name					
Branch Address					
Account No.					
Account Type	Saving/Current/Cash Credit		Branch State		
RTGS Enable	Yes/No	NEFT Enabled	Yes/No	Core-Bank Enabled	Yes/No
Branch Code		MICR Code		IFSC Code	

4. Effective Date

We hereby declare that the particulars furnished are correct & complete. If any transaction is delayed or not effected for incomplete/incorrect information/any other technical reasons, we will not hold OMFED responsible.

Date: \_\_\_\_\_ Signature of the Authorized Signatory of the Bidder with Seal

Certified that the Bank particulars furnished are correct as per our record.

Date: \_\_\_\_\_ Signature of the Bank with seal

## **Annexure 7: Format for Performance Security**

*BG should be obtained from Nationalized/ Scheduled Bank and should be operable and invokable at its Branch in Bhubaneswar*

(To be executed on INR 100/- non-judicial stamp paper)

B.G. No.

Dated:

WHEREAS:

- (A) ..... (“AGENCY”) and The Orissa State Cooperative Milk Producers' Federation Limited having its office at D-2, Sahid Nagar, Bhubaneswar – 751 007 ("OMFED") has issued a Letter of Award (LoA) dated ..... (the "LoA") whereby OMFED has agreed to engage the Agency for ..... (the “agreement”).
- (B) The LOA requires the AGENCY to furnish Performance Security to OMFED of a sum of INR \_\_\_\_\_/- (the "Guarantee Amount") as security for due and faithful performance of its obligations, under and in accordance with the AGREEMENT, for a period of \_\_\_\_\_ (the “Guarantee Period”).
- (C) We, ..... through our branch at .....(Bhubaneswar) (the "Bank") have agreed to furnish this bank guarantee ("Bank Guarantee") as Performance Security. NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:
1. The Bank hereby, unconditionally and irrevocably, guarantees and undertakes to pay to OMFED upon occurrence of any failure or default in due and faithful performance of all or any of the AGENCY’s obligations, under and in accordance with the provisions of the agreement, on its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Agency, such sum or sums up to an aggregate sum of the Guarantee Amount as OMFED shall claim, without OMFED being required to prove or to show grounds or reasons for its demand and/ or for the sum specified therein.
  2. A letter from OMFED that the AGENCY has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that OMFED shall be the sole judge as to whether the AGENCY is in default in due and faithful performance of its obligations under the agreement and its decision that the Agency is in default shall be final, and binding on the Bank, notwithstanding any difference between OMFED and the Agency, or any dispute between them pending before any court, tribunal, arbitrator or any other judicial or quasi-judicial body or by the discharge of the Agency for any reason whatsoever.
  3. In order to give effect to this Bank Guarantee, OMFED shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Agency and/ or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Bank Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for OMFED to proceed against the Agency before presenting to the Bank its demand under this Bank Guarantee.
5. OMFED shall have the liberty, without affecting in any manner the liability of the Bank under this Bank Guarantee, to vary at any time, the terms and conditions of the agreement or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the AGENCY contained in the agreement or to postpone for anytime, and from time to time, any of the rights and powers exercisable by OMFED against the AGENCY, and either to enforce or forbear from enforcing any of the terms and conditions contained in the agreement and/ or the securities available to OMFED, and the Bank shall not be released from its liability and obligation under this Bank Guarantee by any exercise by OMFED of the liberty with reference to the matters aforesaid or by reason of time being given to the AGENCY or any other forbearance, indulgence, act or omission on the part of OMFED or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would, but for this provision, have the effect of releasing the Bank from its liability and obligation under this Bank Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Bank Guarantee is in addition to, and not in substitution of, any other guarantee or security now or which may hereafter be held by OMFED in respect of, or relating to, the agreement or for the fulfillment, compliance and/ or performance of all or any of the obligations of the Agency under the agreement.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Bank Guarantee is restricted to the Guarantee Amount and this Bank Guarantee will remain in force until the expiry of the Guarantee Period, and unless a demand or claim in writing is made by OMFED on the Bank under this Bank Guarantee no later than twelve (12) months from the date of expiry of the Guarantee Period, all rights of OMFED under this Bank Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Bank undertakes not to revoke this Bank Guarantee during its validity, except with the previous express consent of OMFED in writing, and declares and warrants that it has the power to issue this Bank Guarantee and the undersigned has full powers to do so on behalf of the Bank.
9. Any notice by way of request, demand or otherwise hereunder may be sent by hand/messenger or by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of OMFED that the envelope was so posted shall be conclusive.
10. This Bank Guarantee shall come into force with immediate effect and shall remain in force and effect until the expiry of the Guarantee Period (including the claim period) or until it is released earlier by OMFED pursuant to the provisions of the agreement.

11. Capitalized terms used herein, unless defined herein, shall have the meaning assigned to them in the agreement.

12. Notwithstanding anything contained herein:

- i. Our liability under this Bank Guarantee shall not exceed INR .....
  - ii. The Bank Guarantee shall be valid up to ..... ("Expiry Date including claim period" ..... of the Bank Guarantee).
  - iii. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and if you serve upon us a written claim or demand made in the manner prescribed in this Bank Guarantee on or before ..... (Claim Period of the Bank Guarantee) at our Branch at \_\_\_\_\_ Bhubaneswar.
  - iv. After claim period all your rights under this Bank Guarantee will be forfeited and we shall be relived and discharged from all liabilities thereunder, irrespective of whether the original has been returned to us or not.
13. The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with required details to the beneficiary's advising bank (INDIAN BANK, \_\_\_\_\_ BRANCH, BHUBANESWAR, IFSC Code \_\_\_\_\_).

Signed and Delivered by \_\_\_\_\_ Bank by the hand of Mr./Ms. \_\_\_\_\_, its \_\_\_\_\_ and authorized official.

(Signature of the Authorized Signatory) (Official Seal)

NOTE:

- i. The Bank Guarantee should contain the name, designation and code number of the officer(s) signing the Bank Guarantee.
- ii. The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing Branch.

For \_\_\_\_\_ [Indicate name of Bank]

Signature.....  
Full Name.....  
Designation.....  
Power of Attorney No.....  
Date.....  
Seal of the Bank.....

WITNESS: (SIGNATURE WITH NAME AND ADDRESS)

(1)

Signature.....  
Full Name.....

(2)

Signature.....  
Full Name.....



## **Annexure 8: Format for Power of Attorney**

**(to be executed on INR 100 non judicial stamp paper and to be duly notarized)**

Known all men by these presents, we..... (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr./ Ms. (name), ..... son/daughter/wife of ..... and presently residing at ....., who is presently employed with us and holding the position of ....., as our true and lawful attorney (hereinafter referred to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our tender against the Bid document no. [•] dated [•] published by The Orissa State Cooperative Milk Producers' Federation Limited for the “Procurement of Services – [•]”, including but not limited to signing and submission of all applications, bids and other documents and writings,

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,....., THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ..... 20[•].

For

Witnesses

.....  
(Signature, name, designation and address)

1.

2.

Accepted

(Signature)  
(Name, Title and Address of the Attorney)

### **Annexure 9: Format for submitting Pre-Bid Queries**

Bidder to submit the pre-bid queries in following format in both pdf format as well as in excel.

<b>Sl. No.</b>	<b>Clause No.</b>	<b>Page No.</b>	<b>Provision of Document</b>	<b>Queries / Suggestions</b>