

**GG-11/17/2023-EMCD**  
**Government of India**  
**Ministry of Electronics and Information Technology**  
**R&D in Electronics Group**  
**(Electronics Materials & Component Development Division)**

**New Delhi-110003**  
**Dated: 23<sup>rd</sup> August 2023**

**ADMINISTRATIVE APPROVAL**

**Subject:** Administrative approval for the Initiation of the project “**Development of digital networking for preventive and predictive environmental and climatic warning solutions - Building an Entrepreneurial ecosystem for addressing Environmental Issues**” to be implemented by **Adi Shankara Institute of Engineering and Technology (ASIET)** in collaboration with **C-MET, Thrissur** - regarding.

I am directed to convey the Administrative Approval of the Competent Authority to the implementation of the above subject project by **Adi Shankara Institute of Engineering and Technology (ASIET)** in collaboration with **C-MET, Thrissur** at a total estimated cost of **Rs.298.66 Lakh (Rupees Two Crores Ninety Eight Lakh and Sixty Six Thousand only)** as Grant-in-aid from MeitY over a period **36 months**. The details of the project are given in the Annexure enclosed.

2. This issues with the concurrence of JS&FA, MeitY vide Note no. 39 dated 16.08.2023 and approval of Secretary, MeitY vide Note no. 40 dated 20.08.2023 of e-file no. 3105444.

*Meenakshi*  
*23/8/2023*

(Meenakshi Kumar)

Under Secretary to the Govt. of India

1. Pay & Accounts Officer, MeitY.
2. Office of the Principal Director of Audit, Finance and Communication, Scientific Deptt, Shamnath Marg, Civil Lines, New Delhi-110054.
3. D&D Section, MeitY.
4. Finance Division, MeitY.
5. RAO, MeitY
6. Dr. Ajay Kumar, Chief Investigator-I and Assistant Professor at Electronics and Communication Engineering, ASIET, Mattoor, Kalady, Ernakulam, Kerala.
7. Dr. Muralidharan M. N., Chief Investigator-II and Scientist ‘C’ at CoE in IIoT Sensors, Centre for Materials for Electronics Technology, Shoranur Road, M. G. Kavuu, Athani. P. O, Thrissur, Kerala – 680 581.
8. GC (R&D E)/ Sci. ‘G’ and HoD EMCD (SC)/Sci. ‘D’ (SG)/Sci. ‘B’ (CM), MeitY.
9. Master folder/Sanction Folder.

**ANNEXURE TO THE ADMINISTRATIVE APPROVAL No. GG-11/17/2023-EMCD**

1. Name of project : **Development of digital networking for preventive and predictive environmental and climatic warning solutions - Building an Entrepreneurial ecosystem for addressing Environmental Issues**
2. The objective of the project: The primary objective of the project is the development of digital networking for preventive and predictive environmental and climatic warning solutions. The sub-objectives of the project shall be as follows:
- To develop an intelligent sensor module for monitoring and managing environmental pollution.
  - To develop and validate a smart water level monitoring solution with an associated alert for floods.
  - To create a digital system that effectively monitors and distributes water levels in the local area.
  - Development of Explainable AI based analysis software for Internet of Things (IoT) solutions.
  - To create start up ecosystem and skill development around these IoT solutions.
3. Area of coverage : Application oriented Research, Design and Development (R, D&D) having Production potential
4. Name of the implementing Agencies : Adi Shankara Institute of Engineering and Technology (ASIET), Ernakulam, Kerala  
Centre for Materials for Electronics Technology, (C-MET), Thrissur, Kerala
5. Chief investigator: a. Dr. Ajay Kumar, Assistant Professor, ASIET  
b. Dr. Muralidharan M. N, Scientist 'C', C-MET Thrissur
6. Status : ASIET - Registered Society  
C-MET - Scientific Society, Ministry of Electronics and Information Technology, GoI
7. Total project duration : 36 Months
- i. Expected date of commencement : 23<sup>rd</sup> August, 2023
- ii. Expected date of Completion : 22<sup>nd</sup> August, 2026
8. Total project outlay : Rs. 298.66 Lakh
- MeitY Contribution : Rs. 298.66 Crore (GIA)  
(Rs. 151.686 Lakh: ASIET)  
(Rs. 146.9726 Lakh: C-MET)

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23/8/2023

## (i) Budget details of MeitY contribution

(Rs. in Lakh)

Budget Head	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
Capital Equipment (FE Comp.)	53.81	0.00	0.00	53.81
Consumables stores	18.00	18.00	18.00	54.00
Duty on import (if any)	0.00	0.00	0.00	0.00
Manpower	43.358	43.358	46.996	133.712
Travel & Training	5.00	5.00	5.00	15.00
Contingencies	8.00	8.00	8.00	24.00
Overheads, if any	5.949	5.949	6.24	18.138
<b>Grand Total</b>	<b>134.117</b>	<b>80.307</b>	<b>84.236</b>	<b>298.66</b>

## (ii) Budget details of ASIET

(Rs. in Lakh)

Budget Head	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
Capital Equipment (FE Comp.)	23.81	0.00	0.00	23.81
Consumables stores	8.00	8.00	8.00	24.00
Duty on import (if any)	0.00	0.00	0.00	0.00
Manpower	23.1948	23.1948	25.014	71.4036
Travel & Training	3.00	4.00	4.00	11.00
Contingencies	4.00	4.00	4.00	12.00
Overheads, if any	3.056	3.136	3.281	9.473
<b>Total</b>	<b>65.0608</b>	<b>42.3308</b>	<b>44.295</b>	<b>151.686</b>

## (iii) Budget details for C-MET, Thrissur

(Rs. in Lakh)

Budget Head	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
Capital Equipment (FE Comp.)	30	0.00	0.00	30.00
Consumables stores	10.00	10.00	10.00	30.00
Duty on import (if any)	0.00	0.00	0.00	0.00
Manpower	20.1628	20.1628	21.982	62.3076
Travel & Training	2.00	1.00	1.00	4.00
Contingencies	4.00	4.00	4.00	12.00
Overheads, if any	2.893	2.813	2.959	8.665
<b>Total</b>	<b>69.0558</b>	<b>37.9758</b>	<b>39.941</b>	<b>146.9726</b>

## 9. Mode and extent of funding

## i. Budgetary support

## a. Grant-in-aid.

: Rs. 298.66 Lakh

## b. Loan

: NIL

## c. If loan, terms and conditions for Grant of loan

: N.A.

If terms and conditions have been Accepted reference to acceptance

## ii. Internal Generation

: NIL

## iii. Other funding agencies

: NIL



10. Stage for release of Payment

Release no.	Stages of Release	Pre condition/Documentation to be supplied implementing Agency (IA)	Amount to be released
1.	Initiation of the Project and 1st Year installment	i) Acceptance of terms & conditions governing Grants-in-aid by IA.	Rs. 134.117 Lakh
2.	Release of 2 <sup>nd</sup> Year installment	i) Technical and Financial Progress report. ii) PRSG recommendation iii) Audited Utilisation certificate and Statement of Expenditure	Rs. 80.307 Lakh
3.	Release of 3 <sup>rd</sup> Year installment	i) Technical and Financial Progress report. ii) PRSG recommendation iii) Audited Utilisation certificate and Statement of Expenditure	Rs. 84.236 Lakh
		<b>Total</b>	<b>Rs. 298.66 Lakh</b>

11. Milestones

S. No.	Activity	Period (in Year)
1.	Development of IoT solutions and Training to 50 people/students	1
2.	Development of Explainable AI analysis system and skill development in IoT sensor solutions to 100 people/students	2
3.	Testing and validation of Warning solutions, building up entrepreneurial ecosystem and Training to 100 people/students	3

*Meenakshi*  
23/8/2023

(Meenakshi Kumar)

Under Secretary to the Govt. of India