



**GOVERNMENT OF KERALA**

**Abstract**

Electronics & Information Technology Department- International Centre for Free and Open Source Software (ICFOSS) - Plan Schemes 2023-24 - Administrative Sanction accorded - Orders Issued.

**ELECTRONICS & INFORMATION TECHNOLOGY (C) DEPARTMENT**

**G.O.(Rt)No.136/2023/ITD Dated,Thiruvananthapuram, 23-06-2023**

Read 1 Letter No. ICFOSS/151/2022-SECY(DIR) dated 10.04.2023 from the Director International Centre for Free and Open Source Software, Thiruvananthapuram.

2 Minutes of the Departmental Working Group Meeting held on 29.04.2023

**ORDER**

International Centre for Free and Open Source Software (ICFOSS), as per the letter read as 1st paper above has submitted proposal for Administrative Sanction for the scheme of ICFOSS for an amount of Rs. 799 Lakh under the Head of account "3451-00-101-38" for the year 2023-24. The Departmental Working Group meeting of Electronics & Information Technology Department held on 29.04.2023 approved the scheme and recommended to issue Administrative Sanction for implementation of the scheme .

2. Government have examined the matter in detail and are pleased to accept the recommendations of the Departmental Working Group meeting held on 29.04.2023 . Accordingly Administrative Sanction is hereby accorded for an amount of Rs. 799 Lakh (Rupees Seven hundred and Ninety Nine Lakh only) for implementation of the scheme of ICFOSS under the Head of Account "3451-00-101-38" for the Financial Year 2023-24.

3 . The components and objectives of the scheme are detailed below.

**1. OUTREACH PROGRAMMES- (Rs. 100 Lakh)**

**OBJECTIVES**

1. To create new eco system of Startups by providing technical support from ICFOSS R&D wing

2. Skill development through capacity building programme.
3. Conducting awareness and community building activities among students and providing training and capacity building activities in the area of FOSS

#### Details of proposed expenditures/purchases

SL. No	Scheme	Components	Description	Amount in Lakhs
1	Outreach Programmes	Start-up ecosystem	Incubation support for FOSS business solutions	18
		Evangelisation/Community Building	FOSS Cell in Colleges and Schools	34
		General Programs	FOSS meet-ups, International Conference and Academic Research programmes	48
<b>TOTAL = Rs 100 Lakh</b>				

The specifications of the component are as follows:

SI No.	Parameter	Description
1	Amount to be expended for the project	100 Lakh
2	Activity wise statement – how the money to be	Incubation support for FOSS business solutions- Rs.18 Lakhs

	spent	ICFOSS Fellowship Program - Rs. 24 Lakhs FOSS Cell in Colleges & Schools: Rs. 10 Lakhs "FOSS Meet-ups, - Rs. 10 Lakhs International Conference - Rs. 5 Lakhs Academic Research Programs - Rs. 33 Lakhs
3	Outcome of the project	Creating a new eco-system of startups by providing technical support from the ICFOSS R&D wing, and skill development through capacity building programmes. FOSS cells in colleges and schools, Conducting awareness and capacity building activities in the area FOSS.
4	Benefit to the public	Creating a platform for public to interact with various FOSS developers and contributors all over the world.
5	Revenue Generation	License fee, collaborative consultancy work, R&D support fee.
6	Asset if any to be created	Nil
7	Deliverables	Entrepreneurs
8	Beneficiary of the scheme	Government Departments, Public, Startups, Researchers, Students and Faculty.

## **2. ICFOSS INFRASTRUCTURE- (Rs.100 Lakh)**

### **OBJECTIVES**

Office/Lab furnishing, IT Systems and Library

### **Details of proposed expenditures/purchases**

SL. No	Scheme	Components	Description	Amount in Lakhs
2	ICFOSS Infrastructure	Office /Lab furnishing, IT systems, library	Early Maintenance of Office premises,	100

			purchase of computers and other essentials electronic commodities	
<b>TOTAL = Rs 100 Lakhs</b>				

The specifications of the component are as follows:

Sl No.	Parameter	Description
1	Amount to be expended for the project	100 Lakhs
2	Activity wise statement – how the money to be spent	Office/Lab furnishing/Maintenance/Training Centre, - Rs. 20 Lakhs IT Systems-System Upgrade & Purchase, - Rs. 40 Lakhs IT Systems – Server ICT Non ICT – AMC - Rs. 30 Lakhs setting up of library books, periodicals and digital library - Rs. 10 Lakhs
3	Outcome of the project	Early maintenance of office premises, purchase of Computers and other essential Electronic commodities for the on going Planned projects. Annual Maintenance Charge of Servers, UPS, Generator and other Units. Purchase of Academic & Research based books for Library.
4	Benefit to the public	This is an institutional improvement programme therefore there is no direct benefit to the public
5	Revenue Generation	Nil
6	Asset if any to be created	Computers and other hardware, books

7	Deliverables	Efforts to maintain the internal office premises
8	Beneficiary of the scheme	Organisation

### **3. SOCIAL COMPUTING (Rs. 308 Lakh)**

#### **OBJECTIVES**

1. Make the visually impaired community live independently in education and their life.
2. Comprehensive malayalam vocabulary
3. Medium analysis
4. Two way communication system for hearing impaired people.
5. Medicinal plant leaf identification and information retrieval system

#### **Details of proposed expenditures/purchases**

<b>SL. No</b>	<b>Scheme</b>	<b>Components</b>	<b>Description</b>	<b>Amount in Lakhs</b>
		Assistive Technology	Research- learning aid for visually impaired, Assistive devises for learning disabilities	46.62
		Local Language Computing	Two-Way Communication System For Hearing Impaired People, Codemix Data Analysis in Social Media,Machine Translation System For Government Domain Using Neural Machine Translation (NMT ),Medicinal Plant Leaf Identification And Information Retrieval System,	211.38

3	<b>Social Computing</b>		Named entity Recognition (NER) tagged Corpus for Malayalam Preparation, Transfer Grammar for Malayalam English Translation System, Malayalam Computing – Workshops and FDPs, Machine Learning & Data Analytics, Training on LaTeX & FOSS Publishing Tools (Govt. Publishing Firms)	
		Gender Technology	Residential camps- 24nos (2 per month), Back- to - Work-6 nos, Women Winter School/ Summer School (1 each), workshops in colleges-30 nos(all over Kerala) Fellowships -5 nos, Final Hackathon	50
<b>TOTAL = Rs.308 Lakhs</b>				

The specification of the component is as follows:

Sl No.	Parameter	Description
1	Amount to be expended for the	Rs. 308 Lakh

	project	
2	Activity wise statement – how the money to be spent	<p>AT-Learning Aid for Visually Impaired – Rs. 26.93 Lakhs</p> <p>AT-Assistive Devices for Learning Disabilities – Rs. 19.69 Lakhs</p> <p>Comprehensive Malayalam Vocabulary: Rs.22 Lakhs</p> <p>Video Analysis: Vulnerability Detection and Classification of Youtube Videos: - Rs. 21 Lakhs</p> <p>Sarcasm Detection in Malayalam-English codemixed language: Rs. 21 Lakhs</p> <p>Preservation and archiving of Tribal treatment methods and Traditional Medicines: Rs. 27.24 Lakhs</p> <p>Two-Way Communication System for Hearing Impaired People: Rs. 15 Lakhs</p> <p>Machine Translation System for Government Domain Using Neural Machine Translation (NMT): Rs. 20.14 Lakhs</p> <p>Medicinal Plant Leaf Identification and Information Retrieval System: Rs. 15 Lakhs</p> <p>Named Entity Recognition (NER) Tagged Corpus for Malayalam Preparation: Rs. 5 Lakhs</p> <p>Transfer Grammar for Malayalam English Translation System: Rs. 15 Lakhs</p> <p>University Associated Projects: Rs. 10 Lakhs</p> <p>Training on LaTeX and FOSS Publishing Tools (Govt. Publishing Firms): Rs. 12 Lakhs</p> <p>Malayalam Computing Workshops &amp; FDPs: Rs. 20 Lakhs</p> <p>Machine Learning &amp; Data Analytics: Rs. 8 Lakhs</p> <p>Gender Technology- 50 Lakhs</p>
3	Outcome of the project	<p>Learning aid for visually impaired, Assistive devices for learning disabilities. Comprehensive malayalam vocabulary, Two way communication system for hearing impaired people. Machine learning and data analysis malayalam computing workshops and EDPs.</p>
4	Benefit to the public	<p>Visually impaired students will get simple and appropriate tactile devices for making Braille based learning effective and interesting, Comprehensive malayalam vocabulary knowledge about FOSS domains.</p>

5	Revenue Generation	Nominal generation of Revenue by way of Registration fee for external training programmes
6	Asset if any to be created	Software and data as an asset
7	Deliverables	Ready to use prototypes of the devices to learn capital letters, numbers and small letters. Ready to use prototypes of the device to memorise the shapes of letters etc.
8	Beneficiary of the scheme	Visually impaired community, Government and Aided Visually Impaired schools, Students, Researchers & Faculties, general public.

#### **4. OPEN HARDWARE- IoT, HW (RS.118 LAKH)**

##### **OBJECTIVES**

Open drone based disaster management tasks

Capacity building in Open IoT / hardware

Evolve startup business opportunity using Open IoT / hardware

##### **Details of proposed expenditures/purchases**

SL. No	Scheme	Components	Description	Amount in Lakhs
4	Open Hardware-IoT,HW	IoT	IoT enabled panchayath, Open hardware based smart weather station without moving parts, Hackathon and training on open IoT	73
		Open Drones	Research and Development, Hackathon and training on Open Drones, Drones startup support	45



<b>Total = 118 Lakhs</b>
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**The specification of the component is as follows:**

Sl No.	Parameter	Description
1	Amount to be expended for the project	118 Lakhs
2	Activity wise statement – how the money to be spent	IoT-Enabled Panchayath: Research and Development - 50 lakhs Open Hardware Based Smart Weather Station without moving parts : Research and Development - 10 lakhs Hackathon and Training on Open IoT : 5 Lakh IoT Startup Support : 8 Lakh Research and Development - 35 lakhs Hackathon and Training on Open Drones : 5 Lakhs Drones Startup Support : 5 Lakhs
3	Outcome of the project	LoRa WAN network establishment in a local panchayath, Development of POC of acoustics sensor based smart weather station. Field deployment and testing. Capacity building in open IoT/Hardware. Development of swarm drones for disaster assessment in large areas.
4	Benefit to the public	Panchayath authorities and public can monitor field data and improve SDG related requirements. Easily deployable low cost model well help to collect more local weather datas. Enabling open drones for delivery requirements.
5	Revenue Generation	Consultancy Fee

6	Asset if any to be created	IoT gateways and sensor devices. Open drone hardware and flight controllers.
7	Deliverables	IoT enable panchayath, open hardware based smart weather station, open hardware design for drone, delivery drone PoC, swarm drones PoC.
8	Beneficiary of the scheme	Govt. Departments, KSDMA, Navakerala Mission, Smart City , Land Use Board, KSDI, Water Authority

### **5. FOSS Solution Centre ( 173 Lakhs)**

#### **OBJECTIVES**

- 1.To Provide support to various departments in FOSS related issues and concerns
2. Enabling more quality fully automated working environment using a ERP Tool

#### **Details of proposed expenditures/purchases**

SL. No	Scheme	Components	Description	Amount in Lakhs
5	FOSS Solution Centre	(eGov/Consultancy)	LaTeX Digitization Project, FOSS help desk to provide support in FOSS related issues and concerns	89
		Open SDI	Research and Development, Training and Hackathon in Open SDI, Startups support in Open SDI, GIS and Mapping	29
			Research and Development, Training	

	Open ERP	and Hackathon in ERP Solutions, Startups support in ERP Solutions	30
	Cyber Security	Cyber Security for Open IoT Solutions	25
<b>Total = 173 Lakhs</b>			

The specification of the component is as follows:

Sl No.	Parameter	Description
1	Amount to be expended for the project	173 Lakhs
2	Activity wise statement – how the money to be spent	<p>FOSS Help Desk: Rs. 24 Lakhs            GNU Khata - Rs. 10 Lakhs            LaTeX Digitization: Rs. 10 Lakhs            Design and customisation of various templates (10 numbers) in LaTeX Consultancy Team: Rs. 30 Lakhs            Industry Oriented Short Term Training Programmes in MERN and FULL STACK Development: Rs. 15 Lakhs</p> <p>Research and Development - 18 lakhs            Training and Hackathon in Open SDI - 6 lakhs.            Startup support in Open SDI, GIS &amp; Mapping - 5 lakhs            Research and Development - 15 Lakhs            Training and hackathon in ERP solutions: Rs. 9 lakhs.            Startup support in ERP solution - 6 lakhs            Cyber Security for Open IoT Solutions: Rs. 10 Lakhs            Training and Hackathon in Cyber Security for IoT - Rs. 10 Lakhs            Start up support in Cyber Security Solutions for Open IoT -Rs. 5 Lakhs</p>
3	Outcome of the project	Capacity building in OPEN ERPNext tool, creating business opportunities to startups using ERPNext tool. Improved developer contribution to FOSS based GeoNode, QGIS and OSM.

4	Benefit to the public	Get help in the field of FOSS solutions for departments, development and consultancy support to departments, enabling more quality services like fire and safety, flood mapping, notification and water management in disaster mitigation and management, enabling more quality fully automated working environment using a ERP Tool.
5	Revenue Generation	Consultancy Fee
6	Asset if any to be created	Nil
7	Deliverables	LaTeX Digitization- 10 Templates LaTeX, training in Open SDI for 40 professionals , upgradation of Kerala Geo portal, to startups incubated using open SDI, a cost effective, fully customizable single ERP solution for MSMEs, various Government Departments, and public sector Organisations.
8	Beneficiary of the scheme	Students, Researchers, Faculties, General Public, KSDI, KSDMA, State Departments, MSMEs, Startups, Public Sector Organisations.

4. The above schemes shall be implemented adhering to the following conditions.

1. Expenditure should be limited to the current year's budget provision.
2. The expenditure shall be met from the provision available under the appropriate Head of Account.
3. Fund release will be based on actual requirement and the fund released should not be parked in banks.
4. Store purchase rules should be strictly adhered to.
5. Tender/e-tender and other stipulated formalities shall be followed wherever necessary.
6. For Civil Works CPWD rates shall be followed.
7. Post creation and purchase of vehicle are not admissible under the schemes.

5. The Director, ICFOSS, shall follow all the prescribed guidelines, rules,

other formalities and procedures for implementation of the scheme. Proposals for release of funds should contain break up of expenditure, report on the component wise expenditure of funds released during the previous year and component wise Utilization Certificates in the prescribed proforma. Funds will not be released in case of any procedural laxity or violation.

(By order of the Governor)

Dr. Rathan U Kelkar

Secretary

To:

The Director, International Centre for Free and Open source Software,  
Thiruvananthapuram

The Accountant General (Audit/A&E) Kerala, Thiruvananthapuram.

Planning & Economic Affairs Department.

~~Finance Department.~~

~~Information & Public Relations Department (Web & New media)~~

Stock File.

Forwarded /By order

*Santia A.S.*

Section Officer