

NMICPS Technology Innovation Hub on Autonomous Navigation Foundation

Registered office:C/o Indian Institute of Technology Hyderabad, IIT Hyderabad Kandi(V) Sangareddy,
Kandi, Medak-502285

CIN: U73200TG2020NPL140558

Date: 5th October, 2020

To,
Dr. K R Murali Mohan,
The Mission Director,
NM-ICPS and Scientist-G & Head,
ICPS Division, DST.

Sub: Minutes of First HGB Meeting held on 17th September, 2020.

Dear Dr. Murali Mohan,

This is reference with our meeting of Hub Governing Board held on 17th September, 2020.
Please find attached final copy of Minutes approved by all the Members and Signed by the
Chairman Prof. B S Murty.

Thanking you.

**For NMICPS Technology Innovation Hub
on Autonomous Navigation Foundation**

A handwritten signature in black ink, appearing to read 'P Rajalakshmi', with a horizontal line drawn underneath it.

**Prof. Rajalakshmi Pachamuthu
(Project Director)**

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MINUTES OF THE 01/2020-21 MEETING OF MEMBERS OF HUB GOVERNING BOARD OF NMICPS TECHNOLOGY INNOVATION HUB ON AUTONOMOUS NAVIGATION FOUNDATION HELD ON THURSDAY 17TH SEPTEMBER, 2020 AT BOARD ROOM, ACADEMIC BLOCK-A, INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD, KANDI CAMPUS, SANGAREDDY 502285 AT 11.00 AM.

Time of commencement of the Meeting: 11.00 A.M.(IST)

Time of conclusion of the Meeting: 12.30 P.M.(IST)

1. ATTENDANCE

Sr. No.	Name	Designation	Mode of Attendance Physical/Electronic mode
Directors:			
1.	Prof. B. S. Murty	Chairman	Physically
2.	Dr K R Murali Mohan	Member	Through VC from Delhi
3.	Dr. Rajalakshmi Pachamuthu	Member	Through VC from Hyderabad
4.	Dr. Sumohana Channappayya	Member	Through VC from Hyderabad
5.	Dr. S Suryakumar	Member	Through VC from Hyderabad
6.	Dr. Bheemarjuna Reddy Tamma	Member	Through VC from Hyderabad
7.	Mr. Samir Kumar	Member	Through VC from Bangalore
8.	Mr. Kumar N. Sivarajan	Member	Through VC from Bangalore
9.	Dr. Gopichand Katragadda	Member	Through VC from Bengaluru
10.	Mr. Krishna Bodanapu	Member	Through VC from Hyderabad
Invitees:			
11.	CA Saurabh Dashottar	Internal Auditor	Through VC from Hyderabad
12.	CS Jayata Agarwal	Practising Company Secretary	Through VC from Jaipur

2. ELECTION OF THE CHAIRMAN:

As per article 27 of Articles of Association of the company, the Director of IIT Hyderabad (Host Institute) is deemed to be the chairman of TiHAN Foundations and as per Mission communications; Chairman of Host Institute will be Chairman of the HGB. Thus, **Prof. B. S. Murty** was elected as the chairman of the meeting and occupied the chair.

3. QUORUM:

At 11.000 A.M, the Chairman (Prof. B. S. Murty) welcomed the Members present through video conferencing. Thereafter, the Chairman announced that the requisite quorum was present and called the Meeting to order. The Chairman extended a warm and hearty welcome to all the members present at the First Meeting of Hub Governing Board (HGB) of the Company.

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4. LEAVE OF ABSENCE:

All the Members of the HGB were present, thus no leave of absence was required.

5. WELCOME ADDRESS:

Prof. Rajalakshmi Pachamuthu- Project Director/Member Secretary extended a warm welcome to the Members attending the meeting.

6. INTRODUCTION OF MEMBERS:

Dr.Sumohana S. Channappayya - Dean R&D, IIT Hyderabad introduced the Chairman **Prof. B. S. Murty**- Director IIT Hyderabad and **Dr K R Murali Mohan**- Mission Director, NM-ICPS and Scientist-G & Head, ICPS Division, DST.

Dr. Sumohana also introduced Industry Representatives attending the Meeting- **Mr. Samir Kumar**-Managing Director, Inventus (India) Advisors, **Mr. Kumar N. Sivarajan**- Chief Technology Officer at Tejas Networks, **Dr. Gopichand Katragadda**- Founder and CEO at Myelin Foundry and **Mr. Krishna Bodanapu**Managing Director & CEO, Cyient Ltd. & Chairman of CII for 2020-21.

Dr. Sumohana further introduced academic representatives present in the meeting- **Dr. S Suryakumar**- Faculty Incharge Entrepreneurship, IIT Hyderabad, **Dr. Bheemarjuna Reddy Tamma**- Associate Professor, Department of Computer Science, IIT Hyderabad and **Dr. Rajalakshmi Pachamuthu**- Professor, Department of Electrical Engineering, IIT Hyderabad

7. CHAIRMAN'S SPEECH:

Prof. B. S. Murty- Chairman informed the board that Department of Science and Technology (DST) under National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) has sanctioned, the prestigious **Technology Innovation Hub (TIH) on Autonomous Navigation and Data Acquisition Systems (UAVs, RoVs, etc.)** to IIT Hyderabad (IITH). With that reference a Section 8 company limited by Guarantee and not having Share Capital has been incorporated under the name "NMICPS Technology Innovation Hub on Autonomous Navigation Foundation" on 02/06/2020.

The Chairman further informed that the Hub focuses mainly on technology development; human resource & skill development; innovation, entrepreneurship, start-up ecosystem; and international collaborations. The Chairman also explained the roles and responsibilities of HGB, as defined by DST.

He further informed that as per Mission communications, the macro level decisions taken in HGB be communicated to the company for implementation.

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The Project Director of TIH will be a member-secretary for both HGB and BoD and the Chairman and Member-Secretary will be common in both the bodies so that decision flow & implementations could be channelized without any ambiguities.

8. MISSION DIRECTOR'S SPEECH:

The Mission Director NM-ICPS, DST **Dr. K R Murali Mohan** informed the board about National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) project. He explained the details about the overall philosophy of the Mission, technology, strategy and overall Mission objectives.

Dr. Murali also informed that the Mission implementation would create a foundation and a seamless ecosystem from education, human resource, R&D, technology development, innovation to commercialization. It will generate Indian Start-ups, Intellectual Property (IP), Licensing & Monetization, jobs, enhance skills and world class product development resulting in technology driven economic growth.

He further informed about major activities of the Mission i.e. Technology Development, Human Resource & Skill Development, Innovation, Entrepreneurship & Start-Up Ecosystem and International Collaborations.

9. PRESENTATION ON TIH AT IITH:

Prof. Rajalakshmi Pachamuthu- Project Director/Member Secretary informed the board, that DST has provided the guidelines for the operations of Hub Governing Body.

She has further explained TiHAN - Organization and Operation structure will be classified in different wings such as R&D Wing, Academic Wing, Industry Relations Management Wing, Technology Business Incubator Wing and Finance & Administration Wing.

Initiatives taken so far which is presented:

- NMICPS Technology Innovation Hub On Autonomous Navigation Foundation TiHAN Foundation (Section 8 Company) is incorporated
- Bank Account is created in Nationalised Bank with interest bearing feature
- HRD: 2 year Inter Disciplinary M.Tech program in Smart Mobility is started in Aug 2020, PhD students, Post Docs, Research Staffs recruitments going on
- R&D:
 - Testbed on Autonomous Navigation (Aerial/Terrestrial) is proposed to be setup at IITH. Testbed with Mechanical Integration Facility, Test circuits/tracks, and required Equipments is planned. Area to setup testbed is identified in the IITH campus. Master Plan and Design is in progress, which is presented.
 - Academic institutions, Government Labs and Industry (Indian and International) have already expressed interest to collaborate with the Hub in different sub-domains of the technology vertical of Autonomous navigation and data acquisition systems.
 - Call for research proposals for academic and labs is proposed. With industry, R&D collaborations on cost sharing basis, consultancy and consortium mode is proposed with appropriate MoU/NDA.

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- Entrepreneurship: Hub to support: ideation, pre-incubation, incubation, accelerators in the technology vertical of Autonomous navigation and data acquisition. Will also collaborate with IITH technology business incubator – iTIC for this.

Initial grant released from DST will be utilized for the HRD(fellowships, salaries) and the tested development. On further release of funds, other activities will be started.

10. SUGGESTIONS FROM THE MEMBERS, DISCUSSION AND ACTION PLAN:

The Chairman invited all the Industry Representatives for their Opinions and Suggestion.

Following were discussed and suggested:

- Focus on cutting edge infrastructure
- IP friendly ecosystem, Ensuring collaborative work environment
- Application Focus, open source based developmental activities
- Rapid prototyping with appropriate licensing.
- Prioritize activities and set yearly targets
- Models for self-sustainability – consortium based approach, attract funds from VCs, trusts, angel investments, Govt. agencies, etc.

VOTE OF THANKS:

Chairman announced the summary of the discussion, recommendations and decisions taken in the meeting. Before the conclusion of the Meeting, Chairman made the roll call at the conclusion of the meeting and ensured presence of quorum throughout the meeting.

With the item of the agenda being transacted, the chairman thanked the members for making it convenient to attend the meeting and also thanked them for their active participation.

Thereafter, the chairman declared the meeting as concluded.

Date: 02/10/2020

Place: IITH



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Prof. B. S. Murty
Chairman