

# **BUSINESS INCUBATION POLICY OF NEW HORIZON COLLEGE OF ENGINEERING**

**Trends & Technology  
Timeline 2010-2050**

**Incubator Services  
Provided  
at  
NHCE  
for Startups**



Publication of R&D Cell  
New Horizon College of Engineering  
2016

# Business Incubation at New Horizon College of Engineering

## Guidelines and Policy

April 2016

### 1. (a) Preamble: The need to support business incubation activities

In tune with the global trends in higher technological education, New Horizon College (NHCE) encourages entrepreneurship among the Faculty, Staff, Research Scholars, and Students. NHCE will directly and actively support the incubation of "NHCE Incubated Companies" by its Faculty/ Staff/Research Scholars/Students. Some of these companies may be founded based in part or in full on technologies/IP developed by the College, or jointly with it in collaborative mode. NHCE may also provide incubation support to external Start-ups with which Faculty/Staff/Research Scholars/Students are associated as consultants or mentors. Such external Start-ups may sometimes license technology/IP developed by NHCE a priori. The commercialization of advanced technologies developed at the College as a result of incubation will greatly benefit the College as well as society at large and will contribute to the economic resurgence of our country.

### 1. (b) Definitions

NHCE Member(s) (Henceforth called MEMBER): Any permanent faculty/staff on duty or on short/long leave, research scholars and students having live registration.

NHCE Incubation Society (Henceforth called -SOCIETY): A Society registered by and in NHCE, under the Societies Act, for the primary purpose of promoting and fostering Incubation of Start-up companies involving one or more NHCE Member(s), by administering and implementing NHCE's policies on incubation.

NHCE Incubated Company (Henceforth called COMPANY): A registered Company promoted and/or invested in by NHCE Member(s) singly or jointly with others, or those incubated by any of the NHCE incubators located in NHCE premises or elsewhere, and declared by the SOCIETY as such, or an external start-up declared by the SOCIETY as such.

External Start-up (ESU): A registered Company promoted and invested in by non-NHCE Member(s) and not located in the NHCE/SOCIETY/Incubator premises.

Incubator: A physical and/or virtual unit that extends various forms of support for Start-ups and engages in specified relationships with them on behalf of NHCE and/or SOCIETY.

### 2. Types of Start-ups with NHCE involvement

SOCIETY may be actively involved in pre-incubation and incubation of a Start-up company promoted by one or more MEMBER, or by others.

- MEMBER may promote an NHCE Incubated Company (COMPANY).
- MEMBER can be involved with an External Startup (ESU).
- SOCIETY through its incubators may be involved with a COMPANY or ESU.

### 3. SOCIETY's Governance Structure

The SOCIETY will have a Governing Council (GC). The GC may have the following composition:

- *Principal, NHCE- Chairperson.*
- *Registrar, NHCE*
- *Professor-in-charge - an NHCE Professor to be nominated by the Principal, NHCE.*
- *Dean (R&D), NHCE.*
- *Dean (Student Affairs) and/or Dean (Academics) of NHCE.*

- *An external Expert having a good track record in incubating companies.*
- *An external Expert with experience in IPR and Licensing.*
- *An external Expert with experience in Venture Capital/Private Equity.*
- *An NHCE faculty member, preferably below the age of 40 and with familiarity of Start-ups and intellectual property legal and commercial transactions including Patenting, Technology Transfer, Licensing.*

Except the ex-officio members, the remaining members will serve for a period of up to three years, and can be re-appointed for further periods. The Principal, NHCE, will nominate the initial GC, which will make subsequent appointments.

In addition to its above members, the GC may invite experts in finance, audit, IPR, and other such areas, to its meetings as needed. It may also constitute subcommittees including such outside experts for specific tasks when needed.

#### 4. SOCIETY's active support to COMPANY

The SOCIETY will carry out on behalf of the College all dealings with Start-ups directly and/or through its incubators. It will also determine whether a Start-up is to be designated as an "NHCE Incubated Company" (COMPANY). SOCIETY will actively support the COMPANY with a combination of inputs, which could include:

- *Permission to Use Branding in the form of "Incubated By NHCE",*
- *Advice Pertaining to Legal and Commercial IPR Transactions,*
- *Office and Operational Space,*
- *Permission to Use Laboratories, Workshop Facilities and Equipment,*
- *Logistics Support,*
- *Business Management Advice,*
- *Networking Support,*
- *Mentoring,*
- *Seed-Fund When Possible,*
- *Monitoring,*

as per the prevailing NHCE norms pertaining to all the above.

SOCIETY's active support will be provided nominally for duration of three years from the date of formal approval. There may be a pre-incubation period of at most one year. However, on a case-by-case basis, the SOCIETY may decide to support a COMPANY for a maximum period of five years from the date of formal approval, if such support is warranted.

The SOCIETY will govern multiple Incubators associated with different constituents of NHCE. While each Incubator will have and enjoy the flexibility and independence it requires for success in the specific areas of its focus, the SOCIETY will ensure a uniform policy of governance.

#### 5. MEMBER's/SOCIETY's involvement in External Start-up

A MEMBER will be permitted to involve with an ESU, either on a full- or part-time basis as promoter/adviser/consultant/any other approved role. The MEMBER will be permitted to use specified physical and/or intellectual resources (e.g., workshop equipment, laboratory instruments, computing resources, and assistance of MEMBER) of NHCE as per its prevailing R&D norms. Any such use of NHCE resources will be governed by an agreement, which will include the contents, terms and conditions and other implications of the prevailing NHCE IPR Policy.

If a MEMBER makes financial investments in an ESU without:

- *making any other contribution in the form of technical/managerial consulting advice, or*
- *any involvement of NHCE in the form of any commercial transactions of IP, or*
- *any use of NHCE facilities,*

such investments will be treated as a private matter of the MEMBER. The Society will have no role to play in such instances. The MEMBER should however declare this to NHCE in order to avoid any conflict of interest situation. If

the ESU awards a consultancy project to the MEMBER, the prevailing NHCE rules and regulations for consultancy projects will apply.

If, however, the MEMBER, and/or SOCIETY or any of its designated entities, are provided shares in the company as compensation in part or full for technical/managerial consulting or for any support extended by Member, NHCE, or the SOCIETY or its Incubators, the MEMBER and/or SOCIETY may be considered to be involved in the incubation of the ESU. In such a case, the ESU may seek to be designated as a COMPANY by the SOCIETY. The SOCIETY will then take an appropriate decision based on the significance of the role played by the MEMBER/SOCIETY in the ESU.

Only a Start-up formally designated as an "NHCE Incubated Company" by SOCIETY may publicize itself as such. All other Start-ups must desist from using the name or logo of NHCE in their publicity material in spite of any other form of engagement they may have with NHCE.

#### 6. Rules Governing Intellectual Property (IP)

A MEMBER, while on duty or on leave, may be involved in the creation of IP either solely or in association with a COMPANY or ESU.

If such IP is created with the involvement of the MEMBER, then any contract between NHCE and the Start-up specifying the sharing rights for the IP will hold good.

In the absence of such a contractual obligation, the prevailing NHCE IPR Policy, rules and regulations shall serve as the reference in such a context.

In case the MEMBER develops any IP while on leave at the COMPANY which leverages prior IP developed earlier at NHCE, MEMBER must ensure the prior IP is properly licensed by the COMPANY as described below in Section

#### 7. Engagement Process

The MEMBER must begin his/her engagement with a COMPANY by submitting a proposal through Head of his/her Department/Section to Principal/Dean (R&D), who will determine the eligibility of the MEMBER to engage with a COMPANY or ESU. After ascertaining eligibility, Principal/Dean (R&D) will forward the proposal to the SOCIETY. After the SOCIETY accepts the proposal, the MEMBER will be authorized to perform the actions necessary for pre-incubation or incubation, including registration of the Start-up, fund raising, team development, product/services development, consulting, market research and development, etc.

Prior to embarking on these activities, an agreement must be signed between the concerned COMPANY/ESU and the SOCIETY to establish the mode and nature of involvement of the MEMBER in the COMPANY/ESU. Such an agreement is necessary with a COMPANY/ESU when:

- *its shares are given to the MEMBER or the SOCIETY as compensation in part or in full for the MEMBER's contribution, and/or*
- *NHCE's technology/IP is licensed to the COMPANY/ESU, which wishes to pay for the same in part or full in the form of shares.*

As part of the agreement, the COMPANY/ESU shall allot to SOCIETY a certain percentage of its shares, up to a maximum of 9.5%. The exact percentage of shares to be allotted and their dilution status will be negotiated based upon the estimated value of support/assistance provided by NHCE, SOCIETY and the MEMBER to the COMPANY/ESU

In addition, the COMPANY/ESU must also enter into an agreement with NHCE through the Office of the Dean (R&D) if

- *the COMPANY/ESU intends to pay cash in part or in full to NHCE for licensing IPR owned by NHCE*
- *the MEMBER provides consultancy to the COMPANY/ESU or undertakes research-based consultancy as per R&D norms while on duty.*

## 7. Modes of MEMBER's engagement with Start-ups (COMPANY or ESU)

### (A) Faculty/Staff Involvement

- *Capital Investment:* Faculty/Staff may be involved in the Start-up by providing capital investment alone in return for shares, with no other managerial, technical or mentorship involvement whatsoever. All shares thus allotted can be retained by the concerned Faculty/Staff, and the transaction is treated as a purely private commercial transaction of no concern to the College. The Member must declare this to NHCE/SOCIETY, so as to avoid conflict of interest situations.
- *Sabbatical/Extra-ordinary Leave (EOL):* Faculty/Staff MEMBER may avail of sabbatical/ EOL as per the prevailing NHCE leave rules and may work full time for the COMPANY or ESU. If the compensation to the faculty/staff for this is through shares of the COMPANY/ESU in part or in full, in lieu of cash payment, the MEMBER must declare the same to the SOCIETY. No compensation is due to NHCE as long as the involvement of the MEMBER, for which the compensation was paid, completely ceases after the leave period.
- *Special Additional EOL:* In addition to the EOL normally allowed, a Faculty/Staff may be allowed additional EOL for a maximum period of 12 months for engaging with Start-ups. In such cases, the Start-up must compensate NHCE or SOCIETY with an equivalent of 1.5 times the prevailing gross pro-rata salary of the Faculty/Staff for the duration of this period in the form of cash and/or shares.
- *Part Time:* A Faculty/Staff member is allowed to participate in a Start-up on a part time basis as per NHCE consultancy norms with regard to the extent of time spent on such participation. The compensation to the Faculty/Staff member may be in cash for which NHCE norms for consultancy projects will be applicable. Instead, a Faculty/Staff member is allowed to obtain shares of the Start-up company as compensation for the engagement with the company. In such a case, the Faculty/Staff member must apply for approval for engagement with the Start-up, and the COMPANY/ESU must enter into an agreement with the SOCIETY. In such cases, not less than 25% of these shares obtained are transferred to the SOCIETY, and the remaining to the faculty/staff. The total number of shares of the Start-up that SOCIETY holds at any time should not exceed 9.5% of the total allotted shares of the Start-up. In all these cases, the COMPANY/ESU must enter into an agreement with the Office of Dean (R&D) as described above in Section 7.
- *Flexi-Time/Retainer Model:* A Faculty/Staff member is allowed to participate in a Start-up on a flexi-time basis as per NHCE consultancy norms/on mutually agreeable terms with regard to the extent of time spent on such participation without affecting the academic schedules. The compensation to the Faculty/Staff member may be in cash for which NHCE norms for consultancy projects will be applicable or on any other compensation package with mutually agreeable terms and conditions with due prior approval of Principal/Dean (R&D)/SOCIETY before engagement. In such a case, the Faculty/Staff member must apply for approval for engagement with the Start-up, and the COMPANY/ESU must enter into an agreement with the SOCIETY. In all these cases, the COMPANY/ESU must enter into an agreement with the Office of Dean (R&D) as described above in Section 7.

### (B) Research Scholars'/Students' Involvement

- *Full Time:* A Research Scholar/Student can seek permission from NHCE to take special leave for a semester, or an additional period for which formal permission is granted by NHCE, to work for a Start-up on a fulltime basis. This may be treated as withdrawal/ additional academic work/similar to internships etc under permission from NHCE for the specified period for which such special leave is formally granted. The Research Scholar/Student, on returning, has to satisfy all norms (including maximum duration norms of his/her respective programme of study) in order to earn a degree. If the Research Scholar/student is compensated by the Start-up in the form of cash and/or shares he/she must assign to the SOCIETY 5% of the total cash/shares allotted to him/her by the Start-up.
- *Part Time:* A Research Scholar/Student can seek permission from NHCE to work for a Start-up on a part time basis. The NHCE part-time engagement norms in projects during a semester/vacation period will

apply. If the Research Scholar/student is compensated by the Start-up in the form of cash and/or shares he/she must assign to the SOCIETY 7.5% of the total cash/shares allotted to him/her by the Start-up. In this case, the courses that he/she registers for will be regulated by the respective Faculty Advisor(s) or Training and Placement Department or RDC/DC, as applicable.

*(C) Role of MEMBER in Start-up*

The MEMBER may play an executive role/non-executive role in a Start-up depending on whether they will be engaged fulltime or part-time. The MEMBER may be involved full time only after obtaining permission from the College for the appropriate type of leave. The part-time engagement will be as per existing NHCE consultancy norms. The MEMBER can take up an executive role only if they are engaged fulltime with the Start-up.

8. Conflict of interest

When a MEMBER utilizes leave of absence (Sabbatical/EOL, or any applicable equivalent) for direct, active participation in a COMPANY /ESU, it is obligatory that the concerned Head(s) of Department be informed at least three months in advance. Shorter notice needs to be specifically approved by the Head of Department. This is to ensure that the academic programmes of NHCE are not affected at any point in time.

It is essential that the MEMBER must avoid any conflict of interest between their roles in NHCE and in the COMPANY/ESU. This is particularly important if there are NHCE resources in their control which are also sought by the Start-up with which they are involved. A similar situation arises if they are developing IPR in a research activity/project in NHCE that is closely related to the IPR they may be developing when on leave and working in the Start-up. Another situation arises when the relative shareholding of the MEMBER and SOCIETY is sought to be changed by infusion of fresh capital in the Start-up by the MEMBER. While such a move could be a bona-fide move on the part of the MEMBER to support the Start-up, it could potentially have a mala-fide motive of changing the relative shareholding pattern prior to some anticipated upward evaluation and infusion of investment by other parties. Yet another potential conflict of interest arises when shares are allotted by a Start-up to a close relative (spouse, children, and parents) of a MEMBER who is involved with the Start-up.

The SOCIETY will determine the potential areas/activities where there is conflict of interest in the case of each MEMBER who applies for approval for engaging with a Start-up, and arrive at an agreed upon methodology for ensuring transparency in decision making in respect of these activities/areas. The SOCIETY may, if it chooses to, set up an - oversight committee of faculty/staff for specific relationships to ensure that conflicts of interest do not arise. The SOCIETY may also require the MEMBER to declare their financial interests, and those of their close relatives, in the Start-up, at the time of engagement, as well as whenever a change in such interests takes place due to additional investment in the Start-up, or payment/share allotment by the Start-up. In any case, every MEMBER involved with a Start-up must file a declaration periodically with the SOCIETY irrespective of whether there is a change in their financial interests in the Start-up or not. The required periodicity will be determined by the SOCIETY. The SOCIETY reserves the right to obtain a third-party evaluation of the value of the start-up's shares before an MEMBER or their close relative(s) makes additional investments in the Start-up. Such an evaluation will be carried out in a reasonable time-frame. If the SOCIETY deems it fit, it may choose to make an investment in the Start-up of its own at the same price applicable to the MEMBER and obtain shares for the corresponding amount. The SOCIETY reserves the right to make the acceptance by the Start-up of the additional investment by the MEMBER or their close relative(s) conditional on the acceptance of the corresponding additional investment by the SOCIETY.

In case a member of the SOCIETY Governing Council has shares in a COMPANY, the Governing Council will determine whether the said member should resign from the Council, in order to avoid potential conflict of interest, or only recuse himself/herself when matters pertaining to the Start-up with which he/she is involved are discussed.

9. Withdrawal of Support

NHCE reserves the right to withdraw its support to any Start-up that it engages with, following a due process of notice. This may involve withdrawal of access to NHCE's facilities, and/or withdrawal of permission to MEMBER to engage further with the Start-up in any manner, though they and the SOCIETY can continue to hold the shares

they already possess in the Start-up. It will also involve withdrawal of the status of the Start-up as a COMPANY, from which point the Start-up will be required to desist from advertising itself as such thereafter.

Should the need arise; the SOCIETY may also seek modifications to the agreement signed with the Start-up through an amendment, in order to protect NHCE's fair name and its interests.

#### 10. Protection of NHCE's Fair Name

When a Start-up is designated as a COMPANY, it is permitted to advertise itself as such wherever such advertisement is appropriate. However, such advertising carries with it the risk that in case the COMPANY indulges in improper behavior or dealings, NHCE's fair name will be tarnished by association with the COMPANY. In order to protect itself from such risks, NHCE, through the SOCIETY, may seek a seat on the Board of the COMPANY, without liability, in order to ensure transparency in all its dealings. The SOCIETY may seek access to the un-audited and audited balance sheets of the COMPANY. In certain cases, the SOCIETY may even seek visibility of payments above a specified value made by the COMPANY, before such payments are made. All such requirements will be specified in the agreement that will be entered into by the SOCIETY with the COMPANY.

#### 11. Removal of Difficulties

Notwithstanding anything in the above guidelines, the Principal/RDC/SOCIETY may take such measures/modify the guidelines as may be necessary in respect of protecting the interest of NHCE/MEMBER/COMPANY/ESU/Incubatee (*as a Win-Win Model*) and smooth conduct of activities related to Startups. The NHCE reserves the right to change the guidelines from time to time and only the latest rules will be applicable to all the ongoing activities irrespective of the year of sanction of the activities.

## Incubation Centre of NHCE

Details of previous products/innovations developed at NHCE

Name of the Project	Sponsoring Agency	Amount Sanctioned (Rs. Lakhs)	Amount Released (Rs. Lakhs)	Duration (in years)		Awards (if any)
				From	To	
Studies on the Mechanical and Biochemical methodology in treating the spent lubricants in manufacturing industries	Vision Group on Science and Technology (VGST), Government of Karnataka	30.00	30	2012	2013	Appreciated by VGST
Studies on brush seals for gas turbine engines numerical and experimental investigation on design configuration and performance evaluation	Aeronautics Research and Development Board (ARDB) – DRDO, Govt. of India	9.31	6.79	2015	2016	Ongoing Project
Multipurpose Expandable Auditorium On Wheels with 7D+ Simulator with Largest 3D Screen (16') On Wheels	7DPlus Technology Network Company, Chennai	16.00	16.00	2013	2015	Won the EDAF Award & ITC Award
Design and Development of Dental Clinic On Wheels	Palrecha Engineering Works, Mumbai	25.00	25.00	2014	2015	Appreciation from NDRF
Design of Glass Cleaning Robot for High-rise Buildings	Engineering Design and Analysis Forum, Bangalore	4.25	4.25	2013	2014	Appreciation from EDAF
Creation of Motion Files for 3DoF Simulator with Motion Capture System	7D+ Fun Corner, Madurai	28.60	28.60	2011	2012	Best Simulation Award
		20.20	20.20	2012	2013	

The most common incubator services to be provided at NHCE, Bangalore are as follows:

- a) Access to Physical Facilities/Common Services/ High-Speed Internet Access for Incubation
- b) Access to Intellectual Infrastructure at Host Institute
- c) Obtaining Initial Financial Support (Grants, Seed Capital, Support for Recurring Expenses etc)
- d) Assistance for Proof of Concept (PoC) and PoC to Prototype and Testing , Product Design Solutions/Prototyping etc
- e) Feasibility Study (Technical and Financial)
- f) Help with Business Basics
- g) Marketing Assistance/Market Research/Pilot Study/Test Marketing. Enhancement of Marketing Skills,
- h) Commercialization/Scale up:
- i) Access to Bank Loans, Loan Funds and Guarantee Programs and Access to Angel Investors or Venture Capital etc
- j) Business Structuring Advisory: Help with Accounting/Financial Management/ Company Formation/Management Team Identification/HR Services
- k) Help with Presentation Skills and Business Etiquettes
- l) Comprehensive Business Training Programs
- m) Assist to instill Confidence and Access to IT Tools/ Better Business Solutions/Expansion etc (E-Commerce and M-Commerce)
- n) Assisting with Identification of members for Advisory Boards and Mentors
- o) Networking Activities: Links to Strategic Partners; Links to Higher Education Resources/R&D Labs/Facilities
- p) Technology Commercialization Assistance and Management Evaluation
- q) Help with Regulatory Compliance
- r) Intellectual Property Rights/Management

<p>Business Consulting</p> <ul style="list-style-type: none"> <li>• Linkages to improve the efficacy</li> <li>• Advisory and support services</li> </ul>	<p>30 Eminent Academician/Industrial Practitioners/Scientists and Industries have been identified for Linkages and Mentoring/Partnering with them. Many more domain experts and Agencies can be roped in based on the needs and requirements of specific startups.</p>
<p>Experience / Credentials of Full-time Managing Team (Board, CEO and other officials)</p>	<p>Eminent People have been identified to be member of the proposed Board, CEO and other Officials</p>

*Physical Infrastructure:*

Incubation Space: 10,000 Sqft (based on the needs additional Space can be provided)

Centrally Located in IT Hub/Corridor: Surrounded by MNCs, IT/ITES giants such as Intel, Accenture, Cape Gemini, ARM, Symphony, Wipro, Nokia, JP Morgan and Cisco to name a few at Ring Road, Marathalli, Bangalore-560103.

Incubation Space: 10,000+ Sqft.

Total Area of College: 11.32 Acres

Total Built-up Area: 55,993 Sq.Mts

Library: 42,000+ Volumes,

Seating Capacity: 605 Seats,

E-Books: 14,000+,

E-Journals/Learning Resources: 19,000+,

IEEE Xplore Digital Library

Science Direct

Taylor & Francis (E-Books)  
Taylor & Francis (E-Journals)  
Springer (E-Journals & E-Books)  
ASCE (American Society of Civil Engineers)  
KNimbus Digital Library  
Proquest (Engineering)  
Proquest (Management)  
NLIST  
Video Conferencing Facilities: 50 Seats  
Computers with Peripherals: 1000+  
Printers: 50+  
Scanners: 16  
Projectors: 50  
Communication Facilities: High Band internet Connectivity (*can be upgraded as per needs*)  
Power Backup: 24x7 Supported with Generator/UPS etc  
Laboratories: 88 Labs / 11,330 Sq.Mts  
Class Rooms: 72 / 4,752 Sq.Mts  
Dining Areas/Cafeteria: 4 / 1000 Sq.Mts  
Furniture: 5,272  
Seminar Halls/Conference Rooms: 7  
Discussion Rooms: 15

#### *Intellectual Infrastructure and Services*

##### *IT & ITES:*

- a) Dr. C. S. R. Prashanth, Professor and HoD, Department of Computer Science Engineering
- b) Dr. V. Ilango, Professor and HoD, Department of Master of Computer Applications
- c) Dr. Nandakumar, Professor, Department of Information Science Engineering
- d) Dr. S. Mohan Kumar, Professor, Department of Computer Science Engineering
- e) Dr. N. Guruprasad, Professor, Department of Computer Science Engineering
- f) Dr. Gangadharaiah Y H, Professor and HoD, Department of Mathematics
- g) Dr. R. Chinnaiyan, Professor, Department of MCA
- h) Dr. J. Kavitha, Associate Professor, Department of MCA
- i) Dr. M. V. Vijayakumar, Professor, Department of MCA
- j) Dr. Jitendranath Mungara, Professor and HoD, Department of Information Science Engineering
- k) Dr. V. Asha, Professor, Department of MCA
- l) Mr. Sessa Shankar, Director, SEC Communications Pvt Ltd., Mumbai & Bangalore

An Instrumentation Technologist and alumnus of the Indian Institute of Management Calcutta, Sesh has over 2 decades of insight from scaling large business lines as well as working with creative startups. He has experience scaling companies and meeting investor's transaction case in his role as Director with Baring Private Equity Asia with over 5 BN USD under management. He has also spent a decade with IBM in multiple executive roles including as the VP Strategy and Business Development (M&A) for the India South Asia market and running a Global business line. He comes with strong experiences in Operational Excellence and Transformation and is a certified Six Sigma Master Black Belt from GE. He has also successfully founded and exited two startups early in his career and currently works with a number of exciting startups as an investor and mentor. He is also on the advisory board of GINSERV, one of India's earliest incubators.

*Technical:*

*Mechanical:*

- a) Dr. Manjunatha, Principal and Professor, Department of Mechanical Engineering
- b) Dr. M.S.Ganesha Prasad, Professor and HoD, Department of Mechanical Engineering
- c) Dr. G. Prabhukumar, Emeritus Professor, Department of Mechanical Engineering
- d) Dr. K. Gopalakrishnan, Professor, Department of Mechanical Engineering
- e) Dr. Prabhakar Kammar, Professor, Department of Mechanical Engineering

*Electrical, Electronics and Communication*

- a) Dr. Sanjay Jain, Professor and HoD, Department of ECE
- b) Dr. R. Elumalai, Professor and HoD, Department of Electrical and Electronics Engineering
- c) Dr. Mahesh Gowda, Professor, Department of Electrical and Electronics Engineering
- d) Dr. Ethirajan Govinda Rajan, Emeritus Professor of Signal and Image Processing, President, Pentagram Research Centre Pvt. Ltd., Hyderabad, Director, Avatar MedVision U.S., LLC., NC, USA and Director, Pentagram Labs Inc., Cupertino, California, USA
- e) Dr. B Mohan Kumar Naik, Professor, Department of ECE
- f) Dr. Nisha K C R, Associate Professor, Department of ECE

*Civil:*

- a) Dr. Niranjana, Professor and HoD, Department of Civil Engineering
- b) Dr. M. R. Pranesh, Emeritus Professor, Department of Civil Engineering

*Biotechnology:*

- a) Dr. Pratima Khandelwal, Professor and HoD, Department of Biotechnology
- b) Dr. H. Anandavardhan, Professor, Department of Biotechnology
- c) Dr. Suma, S.P, Professor, Department of Biotechnology

*Water and Agriculture:*

Dr.Srinivasa Lingireddy, Ph.D., P.E., F.I.E.

Visiting Professor, University of Kentucky, USA

Founder Director, Fluid Hammer Consultancy Services (P) Ltd, Hyderabad

Mr. Thiruchelvam Ramakrishnan,

Founder Director, ITR Technologies India Private Limited and IT-Rural.com

*Management:*

- a) Dr. Sheelan Misra, Professor and HoD, Department of Management
- b) Dr. V. Devarajan, Visiting Professor, General Manager- Customer Support, Cummins Generator Technologies India Ltd, Pune
- c) Dr. Anitha S Rai, Professor, Library and Information Centre
- d) Dr. D. Udaykumar, Professor, Department of Management

*R&D and IPR:*

- a) Dr. K. Gopalakrishnan, Dean (R&D) and Professor, Department of Mechanical Engineering
- b) Dr. W. Amarnath, Head, Society for the Promotion of Innovation, Creativity and Entrepreneurship (SPICE)
- c) Dr. Mannan Bakthavathsalu, Formerly with Philips Innovation Campus for IPR, Bangalore
- d) Dr. Saurabh Kwatra, International Innovations, New Delhi
- e) Ms. S. Nithya, R. K. Dewan & Co, Patent Attorneys and Trade Mark Consultants, Chennai
- f) Mr. H. L. Narendra Bhatta, Intellocopia IP Services, Bangalore

Legal: Dr. Wooday P Krishna, BE., MS., Ph.D., LLB., LLM (Contracts Including Mercantile Law)

*Financial:*

- a) Dr. V. S. Somanath, Former Chairman, Karnataka Industrial Investment Development Corporation and Former, Deputy General Manager, Dhanalakshmi Bank

*Dr. V. S. Somanath was the Distinguished Professor of Eminence, Anna University, Coimbatore. He holds an MBA and PhD in Financial Management and has a wide range of experience in the financial services sector in merchant banking, development banking, investment banking, commercial banking, venture capital, microfinance, management of NGOs, micro and small enterprises and teaching and research.*

*He is currently Advisor to a number of Corporate in Equity Market, Derivatives including F&O, Commodities and Asset Management, capacity building of SMEs and infrastructure projects, arranging packages for soft intervention of clusters and credit monitoring and is also managing an MF outfit: Nano Ventures.*

*His areas of research interest are promotion of NGO-SHGs linkage and facilitation of microfinance and women empowerment, development of micro and small enterprises and capacity building of micro clusters thru soft intervention, setting up JVs and scaling it to critical mass and portfolio management.*

*He has authored several books and has also published several articles in professional journals and economic and financial periodicals. His recent publication include 'Microfinance: Redefining the Future' published by the Excel Books, New Delhi.*

- b) Dr. Udhayakumar, Professor, Department of Management  
 c) Mr. Madhusudhana Reddy, Chartered Accountant, Madhusudhana Reddy & Co., Bangalore  
 d) Mr. S. Rajasekaran, Chartered Accountant, Chennai

*NHCE could provide the following information to the needy incubatees on*

- a) Service Providers : CA, Lawyers, IP Protection, Real Estate Agencies  
 b) Organizations: TiE, NASSCOM, iSpirt, Coffee Meetup, FHSIdeaLab, JumpStart etc  
 c) Programs/Events: Consrukt Festival, TiE Con, Ideathons (Ideations)/Hackathons etc  
 d) Incubators/Accelerators/Co-Working Space  
 e) Investors/Investor Organizations (Funding Assistance)  
 f) Incoming Trade Delegations  
 g) Government Policies in India/Abroad (*Potential Target Countries as per Market needs*)  
 h) Regulatory Environment etc

*The Proposed List of Support Services to be extended to the Incubatees*

*(Covering Both Virtual Incubation and Physical Incubation):*

a) Access to Physical Facilities/Common Services/ High -Speed Internet Access for Incubation
b) Access to Intellectual Infrastructure at Host Institute
c) Obtaining Initial Financial Support (Grants, Seed Capital, Support for Recurring Expenses etc)
d) Assistance for Proof of Concept (PoC) and PoC to Prototype and Testing, Product Design Solutions/Prototyping etc
e) Feasibility Study (Technical and Financial)
f) Help with Business Basics
g) Marketing Assistance/Market Research/Pilot Study/Test Marketing. Enhancement of Marketing Skills,
h) Commercialization/Scale up:
i) Access to Bank Loans, Loan Funds and Guarantee Programs and Access to Angel Investors or Venture Capital etc
j) Business Structuring Advisory: Help with Accounting/Financial Management/ Company Formation/Management Team Identification/HR Services
k) Help with Presentation Skills and Business Etiquettes
l) Comprehensive Business Training Programs
m) Assist to instill Confidence and Access to IT Tools/ Better Business Solutions/Expansion etc (E - Commerce and M-Commerce)
n) Assisting with Identification of members for Advisory Boards and Mentors
o) Networking Activities: Links to Strategic Partners; Links to Higher Education Resources/R&D Labs/Facilities
p) Technology Commercialization Assistance and Management Evaluation
q) Help with Regulatory Compliance
r) Intellectual Property Rights/Management

Provide action plan to meet business support service

- a) Establishment of Strong Secretariat at Incubation Centre
- b) Creation of Physical and Virtual Facilities to Support Incubatees
- c) Providing Access to Physical and Intellectual Infrastructure at Incubation centre
- d) Providing Access to Various Laboratories at Host Institution and their Network of Industries
- e) Creation of Technical Team with Advisors and Mentors
- f) Preparation of Calendar of Workshops and Seminars
- g) Plan for Consultation and Training Programmes of Incubatees (Virtual/Physical)
- h) Plan for Mentoring, Counseling and Training Sessions of Incubatees (Virtual/Physical)
- i) Plan for Marketing/Promotion/Travel/Networking within the geographical reach

Outline mentoring, counseling and training efforts

It is envisaged to provide the entire gamut of services required for successful incubation centre, right from the Identification/Scouting of Best Ideas for Incubation and then providing Strategic Support, Co-working Space, Technology Support, Operation Support, Access to Seed Funding, VC Funding and Services Support to them along with periodic review process and evaluation process till the Incubatees graduate successfully.

- Deploy automated processes and tools to source, select, surface, on-going tracking and reporting progress of start-up entities
- Participate and ensure regular running of investment committee to select appropriate entities for incubation
- Regular participation and review of incubated entities to ensure they are on track against the program goals and appropriate remediation plans are in place
- Participate and ensure regular running of management committee and their recommendations are being executed
- Ensure active ecosystem is being built around NHIC and suitable support (mentors, co-investors, support services) is made available to incubated companies

Startup companies fall into two major categories. The first are companies that need a daily physical location. These companies become in-house incubator clients. Other companies need occasional access to the incubator facilities but also need the network, support, finance and services that the incubator provides.

Proposed Ecosystem and Support Organisation

The proposed Incubation Centre of NHCE will become the Member/Partner with the following Professional Bodies and Trade Bodies which has been identified to leverage the benefits for the Incubatees and their early Soft Landing or Graduation along with adequate Seed Support of Funds, Accelerator Support etc. to ensure the value for money invested on the entire process by the host Institution, Atal Innovation Mission and other supporting agencies. Many of the Advisors/Mentors who have been identified by AIC@NHCE are already members/patrons of many of the following organizations.

1. The National Association of Software and Services Companies (NASSCOM)
2. The Indus Entrepreneurs (TiE) [TiE Young Entrepreneurs (TYE) and Mentor Match]
3. The National Business Incubation Association (NBIA)
4. The Indian STEP and Business Incubator Association (ISBA)
5. Indian Angel Network (IAN)
6. Jump Startup
7. First100Sales.com/FHS IdeaLab: Business Accelerator
8. IIT-Bombay FOSSEE (*FOSSEE: Free and Open Software in Education*) Project: *It is part of the National Mission on Education through Information and Communication Technology (ICT), Ministry of Human Resources and Development, Government of India.*

9. *The Consortium for Educational Communication (CEC)- Inter University Centres set up by the University Grants Commission of India.*
10. *ICTACT: ICT Academy (ICTACT)*

#### Selection and Exit Policy for Incubatees

Provide selection criteria of the incubatee and the mechanism

#### Selection of Incubatees/Startups

In order to be a successful Incubator, the intake process has to be efficient and effective based on merits of the proposal/ideas. The Incubator has to have the appropriate process and procedures in place for review of prospective contacts/leads, determining if they are the right fit, and providing all necessary resources to make sure they grow and have a successful exit.

- Scouting for Potential Business Ideas: Periodically Conduct Clinics/Workshops/Competitions
- Creation of Entrepreneurship/Startup Awareness and consciousness amongst Target Segment
- Empowering people who dare to dream and Provide necessary support
- Mind to market approach to foster new enterprises and jobs.

#### Criteria for Selection of Incubatees/Startups

- Proposed Idea/Sensible Approach/Novelty as Assessed by Experts/Selection Committee
- Relevance of Proposed Idea/Product and Existing/Futuristic Needs
- Technology Readiness Level
- Right Attitude and skill set/Passion for Startups
- There must be at-least one dedicated entrepreneur involved in the venture
- There must be a formal business plan
- The venture and the team must have high ethical & professional standards
- The venture must have a strong technology/knowledge component EHS requirements must be met
- Key Proof-of-Concept must be demonstrated & must be reproducible
- The venture must be registered as a private limited company, or must be in the process of registration
- The amount of funding requested must be less than Rs 50 Lakhs
- The entrepreneur(s) must be willing to share equity in the venture
- The seed funds requested must be for activities such as product development, prototyping, scale-up, developing IP portfolio, test marketing, trials, certification, testing

#### Criteria for Selection to Provide Seed Fund (*but not limited to the following*):

- Is amount of funding requested enough to reach critical milestone?
- Does the venture have a clear, potentially significant/singular value proposition
- How big/fast growing is the potential market?
- Are target customers clearly identified?
- How credible is the technology? (Is PoC credible in the opinion of domain experts?)
- Are there regulatory/certification/policy risks?
- What are the sources of sustainable competitive advantage (eg. novelty, patentability, fair assessment of competitors' product/technology etc.)?
- What is the quality of the business plan (revenue model, product roadmap, market segments, etc.)?

#### Proposed Terms for Seed Funding:

- Investment mode: Equity ownership in a private limited company
- Equity stake for seed fund: 15% - 25%
- Investment amount: Rs 2 Lakhs - 50 Lakhs
- Investment to be deployed in installments, tied to significant milestones
- Board of Directors (BoD) representation: 1 BoD seat
- Promoter/Founder stakes: Vesting requirements
- Reporting: Bi-annual presentation to Seed Committee + Quarterly/Annual Financials

#### Proposed Type of Incubatees:

The following type of Incubatees will be provided an opportunity at AIC@NHCE

1. Local Entrepreneurs (10%): In and around Bangalore District covering Bangalore Rural Districts
2. Start-up Companies (50%): Potential Clients will be identified through structured mechanism of scouting the interested entrepreneurs having sensible ideas which can be groomed in to Startups with the help of Mentors, Facilities at Incubation Centre along with the Ecosystem for early graduation of the startups.
3. Branch of Existing Firm (2%): Based on the individual merit of the proposal, it will be encouraged.
4. Spin-off from University/Academic Institutions or R&D Centre (13%): Based o
5. Bottom of the Pyramid- Grass Root and Inclusive Growth (25%): Social Innovations and ideas targeting the social development and aiming to bridge the gap and leading to inclusive growth will be given priority. Such ideas coming from rural areas and Tier II and tier III Cities will be given priorities.

#### Describe the Exit strategy:

1. Setting a maximum time limit of 3 years (*Average Expected Timeline for Graduation: 9-36 Months*)
2. Incentives to exit (*Based on the requirements of space for new Incubatees and maturity level/satisfactory progress monitoring etc, Incentives to exit will be decided*)
3. Non-performance of the incubatees (*Continuous monitoring and evaluation will reveal the progress of Incubatees in meeting the milestones as envisaged. Non-performing Incubatees will be vacated as per the terms and opportunities will be provided to other needy aspirants as recommended by the expert Committee*)

#### Incubate companies will leave the Incubator under the following circumstances:

4. If they raised substantial investment from Angel Investor / Venture Capital Fund / any other investor – Rs. 2 Crores or more.
5. If the Incubatee become self sustainable (technically/financially) to further proceed with their business for soft landing
6. Completion of stay for twelve to eighteen months (as agreed, in case of ICT/IT/ITES Startups), unless the stay is extended by AIC@NHCE based on the request/need of the Startups.
7. Underperformance or it is not viable for the business proposition: criteria for the same will be decided and applied by AIC@NHCE based on the decision of the Evaluation Committee on the case to case basis.
8. When the number of employees of the company exceeds 20. However, more than 20 seats will be considered if the cost of each seat will be borne by the Incubatee or on mutually agreeable terms.
9. Change in promoters' / founders' team without concurrence of AIC@NHCE.
10. Any other reasons including the violation of rules and regulations of the AIC which AIC@NHCE may deem it necessary for an incubate company to leave AIC@NHCE.

*Experts Identified to serve in the Board of Management, Advisory Committee and Screening Committee, not limited to the following: (Individual Letter of Consent may be submitted later)*

Mr. Sanjay Anandaram has more than twenty years of experience as an entrepreneur, investor and corporate executive and is currently on the Screening Committee of NSRCEL, IIM-B.

He works with various startups in the US and India as a mentor, board member and occasional angel investor. Sanjay is a founding partner of JumpStartUp Venture Fund, one of the pioneering early stage US-India cross border VC funds, set up in 2000 to invest in software, communications, services and embedded technologies. Prior to founding JumpStartUp, Sanjay co-founded and successfully exited from a Silicon Valley based technology start-up Neta.

Sanjay is an Electrical Engineer from Jadavpur University, Kolkata with an MBA degree from Indian Institute of Management, Bangalore.

Mr. Vinay Deshpande presently serves on the Screening Committee of NSRCEL, IIM-B.

He is the principal founder and Chairman and CEO of Encore Software, data communications and digital signal processing based software solution provider headquartered in Bangalore. He has been an entrepreneur for over twenty years, founding or co-founding several IT ventures. He is currently President of Manufacturers' Association of Information Technology (MAIT).

Vinay has a BE (Electronics and Communications) from Osmania University and an MSEE (Digital Systems) from Stanford University. He has also served as the President of the Stanford India Association.

Prof. G Sabarinathan presently with IIM-B, specialized in Finance & Accounting. Professor Sabarinathan's current research interests are in the areas of Financing Small and Medium Firms in India, Private Equity, Venture Capital and Regulation of Securities Market in India. He currently serves on the investment committee of a European private equity fund investing in India and KITVEN venture capital fund of the Government of Karnataka and advises companies on valuation. He also serves on the Screening Committee of NSRCEL, IIM-B.

Prof. Mathew J Manimala, Professor presently serves on the Screening Committee of NSRCEL, IIM-B.

Chairperson, Organizational Behaviour & Human Resource Management Area, FPM (Fellow in Management), IIM India (1983-1988), M.BSc. (Masters in Business Science), Victoria University of Manchester, UK (1993), MBA, University of Cochin, India (1975-1977), B. A., University of Pune, India, (1972-1975).

Dr. V. S. Somanath, Former Chairman, Karnataka Industrial Investment Development Corporation and Former, Deputy General Manager, Dhanalakshmi Bank. He was the Distinguished Professor of Eminence, Anna University, Coimbatore. He holds an MBA and PhD in Financial Management and has a wide range of experience in the financial services sector in merchant banking, development banking, investment banking, commercial banking, venture capital, microfinance, management of NGOs, micro and small enterprises and teaching and research. He is currently Advisor to a number of Corporate in Equity Market, Derivatives including F&O, Commodities and Asset Management, capacity building of SMEs and infrastructure projects, arranging packages for soft intervention of clusters and credit monitoring and is also managing an MF outfit: Nano Ventures. His areas of research interest are promotion of NGO-SHG linkage and facilitation of microfinance and women empowerment, development of micro and small enterprises and capacity building of micro clusters thru soft intervention, setting up JVs and scaling it to critical mass and portfolio management.

Mr. Sessa Shankar, Director, SEC Communications Pvt Ltd., Mumbai & Bangalore

An Instrumentation Technologist and alumnus of the Indian Institute of Management Calcutta, Sesh has over 2 decades of insight from scaling large business lines as well as working with creative startups. He has experience scaling companies and meeting investor's transaction case in his role as Director with Baring Private Equity Asia with over 5 BN USD under management. He has also spent a decade with IBM in multiple executive roles including as the VP Strategy and Business Development (M&A) for the India South Asia market and running a Global business line. He comes with strong experiences in Operational Excellence and Transformation and is a certified Six Sigma Master Black Belt from GE. He has also successfully founded and exited two startups early in his career and currently works with a number of exciting startups as an investor and mentor. He is also on the advisory board of GINSERV, one of India's earliest incubators.

# New Horizon College of Engineering

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Former Vice-Chancellor of Anna University and Dr.MGR University

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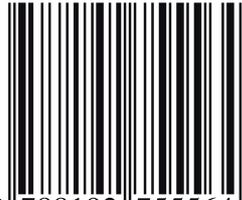
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ISBN 9788192755564



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Version 1.0

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