DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY PUNE

(Deemed to be University)

Date: 10th Dec 2019

MINUTES OF THE 19th MEETING OF BOARD OF MANAGEMENT, HELD ON 10th Dec 2019

The following were present:

Dr C P Ramanarayanan, Vice Chancellor	Chairperson
DG, HR, DRDO	Member(on V.Con)
Shri V VParlikar OS & Director, R&DE/DRDO, Pune	Member(on V.Con)
Prof. PrabhatRanjan VC, D Y Patil International University, Pune	Member
Prof. BharadwajAmruturProfessor,CeNSE, IISc, Bangalore	Member(on V.Con)
Dr. Ajit T Kalghatgi Ex-Director, (R&D), BEL	Member
Dr. N. Sarat Chandra Babu Executive Director, SETS, Chennai	Member
Prof. V Kamakoti, Professor, Dept of CSE, IIT Madras	Member(on V.Con)
Mr Shivraj Dhuppe, DS & DFA R&D[Rep of Addl. FA& JS, DRDO]	Member
Prof S N Kale, Dean (Acad) DIAT	Member
Prof K Balasubramanian, Dean (SA) DIAT	Member
Prof K P Ray, HoD (EE)	Member
Dr Somanchi K Murthy, Associate Prof &HoD AM, DIAT	Member
Dr VidyaGargote, FO, DIAT	Invitee
Mr T V Ananthasubramanian, Jt Registrar, DIAT	Invitee
Cmde A K Sinha (Rtd), Registrar	Secretary

Prof. Raghunath K. Shevgaonkar and Prof. V. Ramgopal Rao were allowed leave of absence [*Prof Ramgopal Rao could not be connected over Skype due to connectivity issues*].

Item No.19.1: Opening Remarks by Vice Chancellor & Chairman, BoM:

At the outset, the Chairman welcomed all the Members and Invitees to the 19th meeting of the BoM. In his opening remarks, he specially invited the seven new Eminent Academicians to their first meeting of BoM and introduced them to the other members. The other members introduced themselves to the new members. The Chairman indicated that all the new members are handpicked by the Hon'be RM and expressed confidence that they will provide all support and guidance to the activities of DIAT, not limited to the meetings but through continued interactions with Faculties and departments and to take the institute to newer heights.

Chairman said, he wished to put on record, the contributions by Prof Pravas Mahapatra, Prof Dipankar Banerjee and Prof S K Koul, who were on the BoM during the last three years. Their guidance and advices have helped the Institute immensely in shaping the activities and growth of the Institute.

In the opening remarks, the Chairman indicated that 2019 had been a very good year for the Institute and highlighted the following achievements of the Institute:

➤ DIAT's status improved in the NIRF ranking from the previous years' 63 to 57. The target for the next year is to figure in 40s. On an analysis, the scores were poor in the perception category. Marketing and visibility enhancement are required and that is being planned through improved interactions and by staying relevant, he added.

➤ The students of CSE Dept [team DCSE_AVENGERS1] won the prestigious Smart India Hackathon-2019 (an initiative of the Ministry of Human Resource Development (MHRD) grand finale – software edition, Mar 2019, held at Jaipur. It carried a prize money of Rs 1 lakh

➤ MoUs have been signed with NTRO and a tri-party MoU with IAF and CAPS.

- Presently, MTech admission in Dept of TM is limited to only sponsored candidates. BoM approval is being sought to admit scholarship students after having AICTE approval.

- As a part of intergovernmental pact between Govt of India and SR Vietnam, DIAT, Pune and MTA, Hanoi signed an umbrella MoU for exchange of students, faculty and to take up joint research projects.

- An MoU was signed between DIAT Pune and Dassault Aviation (DA) France to enable DA to hire and train students of DIAT for gainful employment.

- There is also efforts going on to sign a comprehensive MoU with ISAE, Supera of France and University of West England, Bristol UK.

- A new MoU has been signed with RUBIN University, Mascow, Russia

- It is proposed to launch schools for interdisciplinary subject.

- A letter is being written to BEL to sponsor a Chair Professor in Radar Technology Specalization in Electronics Department.

The Chairman indicated that he has the following plans with regard to teaching and research in the Institute:

- From the conventional PG Programs, the focus will be shifted to inter-disciplinary ones in applied areas of technology viz., on quantum science and information technology involving Physics, CSE, Maths and Electronics;
- Shifting the vertical specializations to schools of inter-disciplinary research
- Funding from UGC, if possible, for the research areas will be explored.

The chairman sought advice, from the Eminent Experts present, to execute the plans.

With the above updates, the Chairman directed the Secretary to go ahead with the Agenda.

Item No.19.2

Reporting items: **The following Reporting items were presented to the BoM**

- **Faculty promotion under CAS**

    BoM was informed that the following faculties promoted / upgraded, as per the Institute / UGC guidelines, to the next academic level:

S. No.	Faculty details	Promoted under CAS Levels/ Designations	Effective date of promotion
1	Dr. SumatiSiddharth Assistant Professor	Stage-2 to Stage-3 [Level-11 to Level-12]	15/07/2019
2	Dr. H S Panda Assistant Professor	Stage-2 to Stage-3 [Level-11 to Level-12]	26/04/2019

During the discussions, the BoM was informed that before the interactions with the candidates for promotion, the UGC mandated eligibility conditions includingpublications, projects and training requirements were considered. During the assessment process, contributions of faculty over and above the minimum requirements were considered.

Expert members indicated that the quality of publications, project output and product delivery also could be included during assessment.

> **Following were appointed as Faculty (on contract):**

Sr. No.	Name	Appointment	Period of contract
1	Ms.GeetikaVerma	Assistant Professor	w.e.f. 01/07/2019 to 31/05/2020
2	Dr.Rishi Raj Sharma	Assistant Professor	w.e.f 08/07/2019 to 31/05/2020
3	Dr VivekGarg	Assistant Professor	w.e.f 01/07/2019 to 31/05/2020

Ratification of BoM was requested, for the above promotions / appointments on contract. After a brief discussion, the BoM ratified the above promotions and appointments on contract.

During the discussions, the DG-HR/DRDO advised for inclusion of details of the DRDO Scientists joined DIAT on deputation terms. Accordingly, the following update was provided:

> **DRDO Scientists on Deputation at DIAT :**

Sr. No	Name	Designation	w.e.f.	Department to which posted
1.	Mr Pankaj Kumar Sharma	Sc E on deputation	31.05.19	Mech Engg
2.	Mr Saheb Gauda Patil	Sc E on deputation	03.06.19	Elecs Engg
3	Dr Bhaskar Majumdar	Sc F on deputation	21.07.19	M&ME

> **Awards and Recognitions:**

- Dept of CSE Team won Smart India Hackathon [an initiative of the Ministry of Human Resource Development. (MHRD)] 2019 Grand Finale, lifting a prize money of Rs. 1,00,000/-.
- DIAT received the Educational Leadership Award [3rd year consecutive] Dewang Mehta award for Educational Leadership in Higher Education.

> **M.Tech Student Strength** – The following student admission data was presented.

PROGRAMME	2016-18	2017-19	2018-20	2019-21
M Tech	245	276 (Including 3 Foreign Students)	262	224

M. Tech 2019- 21 Batch and 2018-20-break up details									
Academic Year	ARMY	NAVY	AIR FORCE	DRDO	ICG	SCHOLARSHIP	SPONSORED	FOREIGN	TOTAL
2019-21	17	19	21	16	6	124	21	0	224
2018-20	22	25	25	21	11	122	34	2	262

During the discussions, the Dean (Acad) updated the new members that the Institute has 9 Academic depts., and offers M Tech in 25 specializations.

> **PhD / MS [By research] Admission**

PROGRAMME	2016	2017	2018	2019
PhD	22	15	21	37
MS	-	01	02	01

On a query by members, it was clarified that Scholarship to the students is as per AICTE (for M Tech) /MHRD (for PhD) norms and over and above the scholarship, students are offered contingency grant and travel support to attend conferences / seminars in their domain areas.

Prof. PrabhatRanjan suggested that the PM scholarship scheme also may be explored.

➤ **Important events**

- 11[th]Convocation held on 30[th]May, 2019. Dr. G Satheesh Reddy, Secretary, DDR&D and Chairman, DRDO presided over the convocation [249 M Tech degrees (2017 - 19 batch) and 16 PhD degrees were awarded during the 11th Convocation Ceremony]

- Created a Centre for "Training and Placement"
  The BoM was informed that this Centre was created to provide adequate focus to Placement Activities, promoting Targeted Training Programmes [of duration more than 7 days], POINTS programme, and IP filing/follow-ups andto provide impetus to Incubation/ start-up activities. Prof Kalghatgi indicated that BEL also has facilities where Institute can take up training programs and faculty can teach in BEL in-campus facilities. Shri V VParlikar indicated that while involving the local industries will definitely employment opportunities to the passing out scholarship students, exploring avenues in PSUs inviting them for placement interviews will provide further support.

- **BDL:** A 6 weeks customized course on MISSILE TECHNOLOGY, specially designed for executives of Bharat Dynamics Limited was organized during 29th July, 2019 to 07th Sept, 2019.

- Integrated Missile Technology – Training programme conducted for BDL scientists – 29th Jul – 7th Sept 2019

- A Short program on Artificial Intelligence Data Service for the DRDO Scientists and Ordnance Factory Executives was held during 14 – 18 Oct 19.

- Conducted a short program on NMR (Nuclear Magnetic Resonance Operation & Analysis) during 17th & 18th Oct 2019.

- 25 – 29th Nov 2019 – Conducted a short course on War-gaming for Navy Officers

- An International symposium on Quantum Information Technology (ISQIT) 2019 was conducted from 2nd to 5th Dec, 2019.

- Faculty Development Programme (FDP) on active learning options to photonics (ACOP) underway, organized by DIAT in association with SPPU, Pune UNESCO, PARIS and ICTP (Triste, Italy) from 8th Dec, 2019. This will conclude on 13th Dec, 2019.

The Chairman directed that hereafter, in BoM Meetings, status of the court matters underway should be reported.

<u>**Item No.19.3**</u>

Progress on the minutes of the 18thMeeting of BoM held on 22nd May, 2019 *(Tabled)*

Agenda Points	Agenda points discussed	Decision	Progress / Action taken
18.5.1	Approval of the M.Tech; PhD and MS (By Res) results of the Academic Year 2017 -19.	BoM, accorded approval to the results, earlier cleared by the Academic Council.	Action completed [249 M Tech degrees (2017 - 19 batch) and 16 PhD degrees were awarded during the 11th Convocation Ceremony]
18.5.2	Adoption of MACP scheme at DIAT for Non-Teaching Staff	BoM accorded approval in principle for the proposal for forwarding to DRDO HQ for financial concurrence.	SoC forwarded to Addl FA & JS (R&D), DRDO
18.5.3	Revision of Institutional Scholarship for the Full time Ph.D Students w.e.f 1st January, 2019	It was indicated the DST being the nodal agency revises the scholarship and the same is adopted by MHRD and other funding bodies. DG-HR indicated that DRDO also is revising the scholarship to JRFs and SRFs.	Action completed
18.5.4	Enhancement of employer contribution towards NPS	BoM accorded approval in principle for the enhanced contribution @14% towards NPS, on Basic + DA.	Action completed
18.6.1	Decentralization of the procedural powers	The powers proposed to be delegated to Deans and HoDs being administrative in nature, BoM approved the proposal.	Action completed
18.6.2	Linking of earned external project funding to the internal promotions of Faculty	It was directed that Externally Funded Projects are not to be considered as pre-requisite for promotion of faculty. However, such faculty having good / well funded projects may be given weightage during promotion interviews and for professional development through allowing them attend international conferences abroad, providing travel grants for the faculty and his/her student etc., out of the funds generated from the projects.	Noted for action
18.6.3	Revision of Semester Fee for PhD Scholars:	The proposal above was agreed with the following additions. a. The fees indicated are per Semester. b. The fees for PhD students (Scholarship Category) in 5th Semester and above (Gen/OBC) will be Rs.35,000/- per sem and for SC/ST Rs. 22,000/- per sem. c. Approval accorded to enhance the fee of M.Tech students [Scholarship category], proportionately, as and when their scholarship is revised.	Action Completed. The Semester fee has been revised w.e.f the Session, July, 2019

18.6.4	Award of Degrees to TSOC-35 TO 38 batches:	The BoM gave go ahead to the proposal as above	Certificates issued Action completed
18.6.5	Seeking AICTE approval to M.Tech in Technology Management and admission of Scholarship Students	After a short discussion, the proposal to seek AICTE approval was approved	Action in progress
18.6.7	Visit of BoM members to Academic Departments	This was agreed upon	Noted for compliance from ensuring BoM meeting

- *During discussions on point 18.6.2, Prof Prabhat Ranjan indicated that a proposal of buy-back opportunity for the faculty may be explored ie., the faculty creating revenue through projects may be given an option to recruit someone else from project funds to complete his portion of teaching and he/she could concentrate on Research.*
- *Prof Amruthur said that normally IIT faculty is provided professional development funding. He shared that in IITs, a share of such project earnings go to the Institute, one share to the Dept and one share to the faculty and to such an extent, the Institute support [salary part] is reduced to the faculty.*
- *Chairman indicated that the faculty get honorarium for teaching in externally funded courses. We are in the process of designing the pattern for income sharing on taking up consultancy by Faculty; he added.*
- *DG-HR/DRDO indicated that DIAT being an institute supported by grant-in-aid by DRDO, can also reduce the funding from DRDO to that extent. He concluded that since it is a financial aspect, could be decided in discussion involving Addl FA.*
- *Prof Kalghatgi indicated that while submitting project proposals to Industries, the Institute needs to balance out the expenditure part as they are also cost conscious while allocating projects to Institutions.*

18.6.4, The Registrar apprised the members about the historic aspects of the issue and how the matter was resolved with the approval of BoM.

While discussions on point 18.6.5, the Chairman apprised the new members about the proposal to have scholarship students inducted to the M Tech in TM. Further, the Institute plans to provide impetus to the Strategic Management areas considering the Tri-Services requirements, requirement of industry discussions on the matter with tri-services and DRDO higher-ups, he added.

Item No.19.4

Confirmation of the Minutes of the 18th Meeting of BoM held on 22nd May, 2019

After a short discussion on the points as indicated under item no 19.3, the BoM confirmed the minutes of the 18th Meeting of BoM.

Item No.19.5

Agenda for discussion:

19.5.1   Approval of Audited Annual Accounts of the Institute for the year 2018-19

The Audited Annual Accounts was cleared by the FC meeting and was recommended for approval for BoM. The Audited Financial Statements for the year 2018-19 were presented for consideration and approval, as under:-

A) BALANCE SHEET

(Rs.in crores)

Particulars	31.03.2019	31.03.2018
SOURCE OF FUNDS		

	74.09	67.81
Corpus/Capital Fund	74.09	67.81
Earmarked Funds (Sponsored Projects)	1.14	1.02
Current Liabilities & Provisions	4.48	4.68
TOTAL	**79.71**	**73.52**

APPLICATION OF FUNDS

Particulars		
Fixed Assets		
Gross Block	93.51	86.98
Less: Depreciation	53.81	47.47
Net Block	39.70	39.52
Investments	0.02	0.02
Capital Work in Progress	0.19	0.09
Current Assets	20.16	20.08
Loans & Advances	2.01	1.48
Income & Expenditure A/c	17.63	12.33
TOTAL	**79.71**	**73.52**

B) INCOME AND EXPENDITURE A/C

Particulars	31.03.2019	31.03.2018
INCOME		
Academic Receipts	2.01	1.77
Interest Earned	0.84	0.95
Miscellaneous Income	0.82	1.26
Grants for Revenue Expenditure	25.78	30.12
Excess of Expenditure over Income	5.29	3.47
TOTAL	**34.74**	**37.56**
EXPENDITURE		
Establishment Expenses	18.27	16.97
Administrative Expenses	7.70	10.65
Academic Expenses	2.43	3.57
Depreciation	6.34	6.36
TOTAL	**34.74**	**37.56**

In view of the FC clearance, the BoM approval/ ratificationwas sought for the Audited Annual Accounts for the year 2018-19.

During the discussion on this point, the BoM Members sought extend of support by DRDO in general and for the maintenance. The forum was informed that maintenance works are undertaken by the MES and new constructions, by CCE / MES and as apprised of the new hostel building coming up which are sufficient to meet all the residential requirements of students.

After a brief discussion, the BoM approved the Audited Annual Accounts of the Institute for the year 2018-19.

19.5.2 Annual Report for the year 18-19

Annual Report for the year 2018-19 was tabled for perusal and ratification of BoM as the same has already been sent to Parliament for tabling.

The Salient features of the BoM presented is given as Annexure - I

While going through the annual report, a view came up that instead of covering the developments department-wise, it would be nice to give an account of the achievements

in a general way (not too technical) so that it would be easy to follow for the readers and especially while tabling in the parliament, by the parliamentarians.

The BoM ratified the item with a comment that care should be taken to schedule a meeting for consideration and approval of BoM before final printing / forwarding for placing on the table of parliament.

19.5.3 **Change in mode of recruitment to the position of Assistant Registrar**

Proposal: The Rules and Regulations governing service conditions, DIAT (2009) prescribes 3 positions of Asst Registrar. Recruitment to the position is by Promotion failing which by Deputation [19.5.3-I]. Promotion is not possible if there are no eligible candidates and DIAT could not find a suitable candidate for the position of Asst Registrar, in spite of having advertised the position twice, under deputation terms.

The 5[th]BoM held on 23/03/2015 approved adoption of MHRD/UGC/DOP&T pay and service conditions for DIAT Staff [Annexure-19.5.3-II]

As per the MHRD communication to UGC No.1-32/2006-U.II/U.I(ii) dated 31 Dec 2008 and No.1-7l2015-U.II(2) dated 2nd Nov 2017, the mode of recruitment is 50% by DR and 50% by promotion from the lower grades [Annex-19.5.3-III]. A copy of the RR of Delhi University, in this regard is placed opposite. [Annex-19.5.3-IV]

It is proposed to adopt the formula of 1:1:1 i.e., to fill up 01 position of Assistant Registrar by promotion; 01 position by Direct Recruitment and 1 by deputation or contract. In case of non-availability of suitable candidates by deputation or contract, it can be filled by DR.

Discussion: *The Secretary informed the forum that DIAT is re-considering the matter and it will be taken up once matter is finalised.*

Item No.19.6

Any other point with the permission of the Chair

In the absence of any other point, the meeting concluded with thanks to the Chair. The Chairman thanked all the members for their active participation and for the valuable advices rendered. He said that DIAT look forward to their continued patronage.
■■■

[Cmde A K Sinha (Retd)]
Secretary, BoM and
Registrar

Salient features of Annual Report 2018-19 presented to BoM

1.   The Annual Report 2018 – 19 has been brought out in a structural format with details of Governing Structure, various statutory and other committees in place for the effective functioning of the Institute, achievements, acquisitions of infrastructure, development activities, research activities, visits and collaborative efforts by the departments and publications by the faculty during the reporting year.

     IMPORTANT ACHIEVEMENTS:-

2.   **10ᵗʰ Convocation of Defence Institute of Advanced Technology:**

     The 10ᵗʰ Convocation of the Defence Institute of Advanced Technology (Deemed University), Pune was held on 25ᵗʰ May 2018. Dr. S Christopher, Secretary Department of Defence R&D, Chairman, Governing Council DIAT (DU), presided over the function, delivered convocation address and distributed the degree certificates. A total of 256 students were conferred degrees (Ph D – 22 students and M Tech – 234 students).

3.   **Ranking by National Institutional Ranking Framework (NIRF), MHRD:**

     The Defence Institute of Advanced Technology has been **adjudged 57th ranked Institution** in India under Engineering category by the MHRD, Govt of India through National Institutional Ranking Framework (NIRF), 2019, on the basis of excellence in teaching learning, research and innovation.

4.   **Review of the functioning of Defence Institute of Advanced Technology (Deemed to be University), by University Grants Commission and All India Council for Technical Education:**

     Clause 11.2 of the UGC (Institutions Deemed to be Universities) Regulations, 2016 provides for a mandatory intensive external review of every Institution Deemed to be University , once in every five years based on the criteria prescribed by the Commission from time to time. Accordingly, an Expert Committee was constituted by the Commission to review the functioning of DIAT (Deemed to be University), Girinagar, Pune – 411 025, Maharashtra. The Committee visited DIAT during 23 – 24ᵗʰ August 2018 to review its functioning of DIAT. The UGC expert committee recommended continuation of deemed to be University status to DIAT. The report submitted by the UGC Expert Committee was placed before the Commission in its 535ᵗʰ meeting (Item No 2.06) held on 27ᵗʰ Sept 2018. The Commission considered and approved the report. Similarly, AICTE expert committee also visited DIAT during the above mentioned period to review the functioning of DIAT.

5.   **Publications**: The publications by the Faculty during the year totalled 321 (Books – 03; Book Chapters - 17; National Journals – 219; International Journals – 5, Conference Proceedings – 76 and Patent - 1)

6.   **Memorandum of Understanding:** 17 National and International MoUs had been signed during the years 2017 – 18 (5) and 2018-19 (12) including ones with DASSAULT Aviation (France), RUDN University (Russia).

7.   **New labs and test equipment:**   Various departments added number of state of the art labs and test equipment and procured many high end equipments.

8.   **Ph D and M Tech Degrees:** 24 students including 3 DRDO, 3 Tri service officers and 18 Scholarship qualified for award of the Degree of Philosophy (PhD) during the year. 234 MTech students passed out during 2017 – 18 which include,

(i)	Tri – service officers	-	48
(ii)	DRDO Scientists/ personnel	-	30
(iii)	Sponsored	-	24
(iv)	Scholarship students	-	132

9. **Induction Training:** 'Department of Induction Training' conducted POINTS 22 Batch from 10th Feb 2018 and Matlab& Simulink Course for DRDO Scientists in 04 different Batches.

10. **Report from NSS Centre:** On 2nd October 2018, NSS Centre DIAT (DU) celebrated the 150th birth anniversary of Mahatma Gandhiji. On this occasion NSS Volunteers' joined hands to plant 100 saplings in remembrance of the 'Father of Nation' Mahatma Gandhiji in the premises of DIAT (DU) technical area.

11. **Sports:** DIAT organized Sports Meet and Cultural FEST as a two separate events under the title as SPANDAN 2019 and PRAYAG 2019. There was an overwhelming interest and participation by students and faculty of all the departments in the fest.

12. **Projects:** Almost all the departments of the Institute have ongoing DRDO/ Externally Funded Projects and their progress is good.