CHAPTER FIVE

GOVERNANCE OF THE IITs

*"The 20ᵗʰ century's unprecedented gains
in advancing human development
and eradicating poverty came largely
from technological breakthroughs…
Technology is a tool, not just a reward,
for growth and development…"*

*UNDP 2001:
Human Development Report.*

CHAPTER FIVE

GOVERNANCE OF THE IITs

The Institutes of Technology Act (IIT Act) provides for an IIT Council chaired by the Union Minister of Human Resource Development and consisting of more than 30 members, including the Directors and the Chairmen of the Boards of Governors (BOG) of the seven IITs. Although, in the experience of the last ten years or so, the IIT Council has not been able to meet consistently even twice in a year as recommended by the last Review Committee, this IIT Review Committee (2004) does not recommend any change in the composition of the Council.

The Nayudamma Review Committee of 1986 had averred that there is a need for the Council to be assisted by two Advisory Committees, one for academic matters and another for administrative matters. However, this recommendation could not be successfully implemented. In the present Committee's view, there is a need for what has been termed the PAN-IIT Synergy Committee. A Committee of this nature is needed for the purpose of deliberating on such matters as have a bearing on the functioning of the whole group of IITs.

It is also this Committee's view that the PAN-IIT Synergy Committee should be set up as an empowered Committee reporting to the IIT Council. Accordingly, the following fifteen member composition is suggested:

(1) Chair:

Secretary, MHRD

(2) Co-Chair:

A member of IIT Council, other than the functionaries in MHRD, to be chosen by the Chairman, IIT Council with a term of 3 years.

(3 to 15) Members:

2 Chairmen of BOGs by rotation every 2 years

7 Directors of IITs

2 Members among the eminent educationists/scientists/technologists and professionals who are members of the IIT Council to be nominated by the Chairman IIT Council for a term of 3 years.

Joint Secretary and FA, MHRD

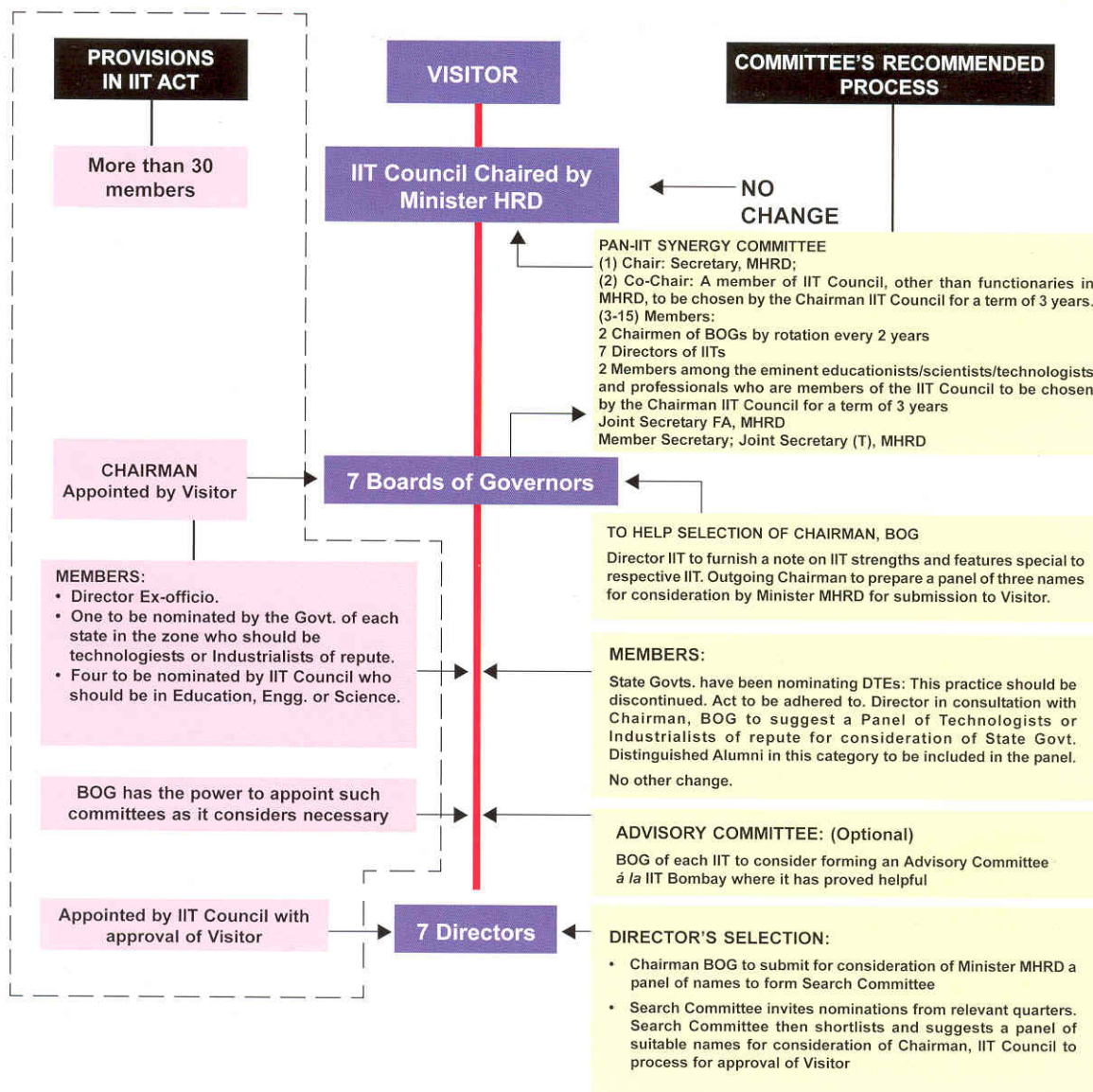Member Secretary: Joint Secretary (T), MHRD.

5.1: THE PAN-IIT SYNERGY COMMITTEE

➤ The PAN-IIT Synergy Committee will function essentially like the Standing Committee of the IIT Council.

➤ Section 33(1) of the IIT Act has charged the IIT Council with the "duty to coordinate the activities of all the Institutes".

➤ The coordination is particularly needed in regard to matters pertaining to non-teaching staff as decisions taken by individual Boards of Governors have a bearing on this cadre of employees in the other IITs. Such issues call for more frequent attention than the frequency of the IIT Council meetings. The IIT Synergy Committee can fulfill this need by meeting at least 4 times a year. This will relieve the BOGs of the IITs of the burden of having to spend their time and energy on such matters and that without having the views of the rest of the IITs.

➤ In regard to specific programmes and plans related to academic matters covering teaching, research and development, it is best left, in respect of the individual IITs, to the overall guidance and the supervision of the respective BOGs. Freedom in regard to academic issues has everywhere yielded excellent results. Any attempt to needlessly homogenise their academic functions or cast these institutions into the same mould in regard to academic programmes would be futile and counter-productive. At the present time, IITs do enjoy the kind of autonomy that is desirable. As a result, one notices certain good practices that each of the IITs has uniquely implemented. The PAN-IIT Synergy Committee provides an excellent forum for exchange of information on good practices.

➤ It will be a support to the IIT Council, if the PAN-IIT Synergy Committee considers budgetary issues as well as plans for the IITs in a larger perspective. The perspectives could encompass national needs and the academic performance and stature of the IIT system as a whole in a global context. The PAN-IIT Synergy Committee is in a position to provide the motivation and the needed support to the IIT System to reach a high mark in the world community of engineering universities and institutions. This committee would also be in a position to develop cooperative approaches with other Ministries such as those of Science and Technology and Communications and Information Technology so that funding could be augmented for research, and for the IT area.

➤ In regard to admission matters, nomenclature of degrees and courses and related items, the Synergy Committee may take a view in a way common to all the IITs.

In this context, it is further suggested that it would be very helpful to have DG CSIR and Secretary, DST join the PAN-IIT Synergy Committee. If either or both of them are not already included in this Committee, they may be invited on occasions when research promotion, as recommended by BOG or Director concerned, is to be discussed. Both these heads of agencies command considerable resources. They have been regularly supporting research endeavours in the IITs. They would be in a position to augment their support to the IITs if the PAN-IIT Synergy Committee feels that such augmentation is necessary in view of the case made out by an IIT and the particular IIT is able to show a commendable performance.

In the same way, the Secretary, Ministry of Communications and Information Technology could be involved as this Ministry would be in a position to join hands with MHRD cooperatively to assist one or more of the IITs in the IT area.

PROVISIONS IN IIT ACT

More than 30 members

CHAIRMAN
Appointed by Visitor

MEMBERS:
• Director Ex-officio.
• One to be nominated by the Govt. of each state in the zone who should be technologists or Industrialists of repute.
• Four to be nominated by IIT Council who should be in Education, Engg. or Science.

BOG has the power to appoint such committees as it considers necessary

Appointed by IIT Council with approval of Visitor

VISITOR

IIT Council Chaired by Minister HRD

7 Boards of Governors

7 Directors

COMMITTEE'S RECOMMENDED PROCESS

NO CHANGE

PAN-IIT SYNERGY COMMITTEE
(1) Chair: Secretary, MHRD;
(2) Co-Chair: A member of IIT Council, other than functionaries in MHRD, to be chosen by the Chairman IIT Council for a term of 3 years.
(3-15) Members:
2 Chairmen of BOGs by rotation every 2 years
7 Directors of IITs
2 Members among the eminent educationists/scientists/technologists and professionals who are members of the IIT Council to be chosen by the Chairman IIT Council for a term of 3 years
Joint Secretary FA, MHRD
Member Secretary; Joint Secretary (T), MHRD

TO HELP SELECTION OF CHAIRMAN, BOG
Director IIT to furnish a note on IIT strengths and features special to respective IIT. Outgoing Chairman to prepare a panel of three names for consideration by Minister MHRD for submission to Visitor.

MEMBERS:
State Govts. have been nominating DTEs: This practice should be discontinued. Act to be adhered to. Director in consultation with Chairman, BOG to suggest a Panel of Technologists or Industrialists of repute for consideration of State Govt. Distinguished Alumni in this category to be included in the panel.
No other change.

ADVISORY COMMITTEE: (Optional)
BOG of each IIT to consider forming an Advisory Committee *á la* IIT Bombay where it has proved helpful

DIRECTOR'S SELECTION:
• Chairman BOG to submit for consideration of Minister MHRD a panel of names to form Search Committee
• Search Committee invites nominations from relevant quarters. Search Committee then shortlists and suggests a panel of suitable names for consideration of Chairman, IIT Council to process for approval of Visitor

Figure 5.1: Proposed Governance Structure for IITs

It will be necessary to ensure that the Synergy Committee rather than the Board of Governors addresses most of the items pertaining to non-teaching employees. Uniformity in decision-making in such staff matters would thus be ensured. This would obviate MHRD's intervention each time an IIT comes up with a decision which may result in an anomaly, as appears to have happened in the past in regard to employees' pay-scales, nomenclature of their posts or their upgradation.

The PAN-IIT Synergy Committee needs to concern itself with loftier goals. The IITs have made a great impact on the public mind as islands of excellence. There is more to be done by way of their educational programmes, research output including the outturn of Ph.Ds, and establishing stronger partnership with the engineering industry. The PAN-IIT Synergy Committee is in a position to design a road map including setting quantitative goals of specific achievements, such as output per faculty, for the IIT system as a whole to make its impact on the world scene. This may translate to

higher ranking of IITs in the world in comparison with similar institutions based on widely accepted benchmarks. The budgetary requirements in this context should be taken up for making clear recommendations to the IIT Council and then, *via* its Chairman, to the Government as well as to the other interested groups such as alumni and industry leaders.

The Board of Governors of IIT Bombay has an Advisory Committee consisting of eminent experts in fields relevant to the Institute, industry leaders and distinguished alumni. The Advisory Committee has been in place for the last four years and has served as an instrument of significant support. Given the experience of its members, they have provided to the Chairman and the Director their valuable suggestions and views which have stood the IIT Bombay in good stead. This example is worth the consideration of the other IITs. The respective BOGs may, after such consideration, constitute their own Advisory Committee which may meet preferably twice in a year or at least once a year.

5.2   AUTHORITIES OF EACH INSTITUTE

As per the Institutes of Technology Act, the following constitute the authorities of each IIT: (a) Board of Governors (BOG) (b) Senate and (c) Such other authorities as may be declared by the schedule to be the authorities of the Institute.

The Senate comprises, besides the Director and a few others, all Professors of the IIT concerned. The Senate deals mostly with academic and related matters. Although the Senates are unwieldy in size, the Review Committee would not at this stage suggest any revision. On the other hand, with regard to the BOG, the Committee has recommendations to make and these are discussed below.

5.2.1   Board of Governors

The Chairman of the Board of Governors is to be nominated by the Visitor as per the Act. Nayudamma Committee recommended that the Chairman of the Board of Governors should ordinarily be a non-official and a person of eminence. This recommendation has been fulfilled and the IITs have been fortunate in having as their Chairmen eminent persons drawn from academia, industry and other spheres of relevance to the IITs. The Act also stipulates that Governments of the States in the relevant zone have to nominate one member each and the IIT Council 4 members to the Board.

As a step intended to help ensure, on a continuing basis, an appropriate choice of the Chairman as also of the nominated members, the Committee makes the following recommendations:

• The Director of the Institute prepares a short note on the core strengths of his IIT and the future direction that his IIT would aim to pursue. This note should be placed for the consideration of the outgoing Chairman, as and when his tenure expires (at the end of his first or second term as decided by the Visitor). The Chairman in turn takes into account the Director's note and suggests a panel of three names, in consultation with the members of his BOG, for consideration of the Chairman, IIT Council who in turn seeks the approval of the Visitor.

- As per the IIT Act, one person is to be nominated by the Government of each of the States comprising the zone in which the institute is located from among persons who are technologies or industrialists of repute. However, it is observed that often the State Governments nominate their Directors of Technical Education (DTEs). Each IIT then ends up having on their Board one or more of the DTEs depending upon the number of States in the region. This practice, which is in contravention of the provisions of the Act, should be dispensed with. It should be brought to the notice of the State Governments that it is essential for them to nominate technologists or industrialists of repute. It would help the process if the Directors of IITs, in consultation with their respective Chairmen of the BOG, take the initiative to provide a panel of names for the consideration of the State Governments, with due knowledge of the MHRD. This would help in ensuring participation of reputed industrialists/technologists. If among a group of this kind there are distinguished alumni in the region, their names should be invariably mentioned in the panel. Alumni are likely to play an active and a constructive role in deliberations of the BOG.

- The Act also stipulates that IIT Council should nominate 4 persons having "Specialised knowledge or practical experience in respect of education, engineering or science". In the light of this clause, and once this Committee's recommendation favouring setting up a PAN-IIT Synergy Committee, which includes MHRD Joint Secretary (T) and Joint Secretary (Finance) as members, is accepted, the *raison d' etre* for bringing these officials in to the Boards will disappear *(status quo ante)*. The Finance Committee, however, should not be changed and the presence of FA, MHRD in the Finance Committee, as a nominee of the Government, is essential. With all 4 nominees of the IIT Council being reputed professionals, the BOG will reflect the eminent professional character that the IIT Act had envisaged for the BOG. With eminent alumni willing to help their IITs in various ways, their presence in the BOGs, as distinguished achievers in the areas of education, higher level management or industry would add to the effectiveness of the BOGs. This suggestion may be kept in view whenever nominations to the BOGs are made.

The Committee has also recommended a few other responsibilities for the BOG. These are given in the next page as a box item.

Functions of the Board of Governors

IIT ACT

Section 13 (1): The Board shall be responsible for the general superintendence, direction and control of the affairs of the Institute and shall exercise all the powers of the Institute not otherwise provided for by this Act, the Statutes and the Ordinances, and shall have the power to review the acts of the Senate.

Section 13 (2): The Board of any Institute shall

- take decisions on questions of policy relating to the administration and working of the Institute;

- make Statutes;

- institute and appoint persons to academic as well as other posts in the Institute;

- consider and pass resolutions on the annual report, the annual accounts and the budget estimates of the Institute for the next financial year as it thinks fit and submit them to the Council together with a statement of its development plans.

RECOMMENDATIONS

➢ The Committee recommends that the BOG should decide on financial rewards for outstanding performers among the faculty members (The proceeds of the corpus will be used for this purpose). This is intended specially to encourage substantially higher research output of high quality, turn out of Ph.D.s as well as securing patents in a far greater measure than at present. The performance criteria and the incentive amounts are to be determined by the BOG.

➢ The BOG should also decide on allowing selected Professors of the Institute to go upto the age of 65 years before they are retired from the service of the Institute.

➢ Broadly, the Board may ensure that the generation of resources exceeds their utilisation. In overseeing utilisation of the funds, the Board may pay particular attention to evaluate their impact on raising the quality of teaching and research infrastructure (teaching labs/research lab facilities and library resources) and the capacity of the Institute to play an increasingly greater role in the nation's innovation system. While this should receive priority in the utilisation of the resources, the quality of infrastructure and facilities for the IIT community have to be constantly upgraded. As long as the BOG focuses attention on these issues, in its overall consideration of the Budget and Accounts, the right balance in the utilisation of the IIT resources can be ensured on a sustainable basis.

➢ *In order for the above items to receive due attention, the BOG needs to be spared the trouble of having to deal with a whole host of employees' issues, particularly those pertaining to non-teaching staff whose number is sizeable in every institute.*

➢ *The Committee has, therefore, recommended that most employees' and related matters, which have to be considered on a uniform basis by all the IITs, should be the burden of the PAN- IIT Synergy Committee.*

5.2.2 Director

As per the Act, the Director of each institute is to be appointed by the Council with prior approval of the Visitor. The Committee recommends the following process for the selection of a Director, which has stood an eminent institute like the Indian Institute of Science in good stead. In the recommended process, the BOG suggests a panel of 3 to 4 eminent members, one of whom shall be Chairman, BOG, for consideration of the MHRD for constituting a Search Committee. The MHRD then formally constitutes a Search Committee consisting of about 3 to 4 distinguished persons which should include the Chairman of the Board of Governors. The Search Committee invites nominations from relevant quarters like academic institutions, Heads of National Laboratories and others as well as the Members of the IIT Council. The Search Committee then considers the nominations so received, as well as those added by its members, prepares a short list and recommends a suitable person. The stature of the person recommended should be atleast equivalent to, or desirably higher than, that of an IIT Professor, for the consideration of the Chairman of the IIT Council and the Visitor. Once the decision of the Visitor is received, the person selected is invited to occupy the Directorship of the concerned IIT.

5.2.3 Deputy Directors and Deans

The IIT Act mentions the positions of Director, Deputy Director and Registrar. However, there is no mention of Dean(s). This has been pointed out as an omission since the Deans who are chosen by the Director, in every one of the 7 IITs, have been shouldering substantial academic and administrative responsibilities. Table 5.1 shows the number of Deputy Directors and Deans in the different IITs. **There is a need formally to accord recognition to the position of Deans in the Statutes of the IITs wherever this may not have been done.**

We have referred to the setting up of a human resource (HR) unit in Chapter 6 to be headed by a Dean to provide the sharpest focus to recruitment of faculty in the IITs. In some of the IITs, during the early days of their establishment, the Dean (Faculty) has played a vital role in building up the faculty of the IIT concerned. Table 5.1 shows that, in some of the IITs, the Dean (Faculty) is not specifically mentioned and, in some of the others, the Dean (Faculty) has other responsibilities as well. In the Committee's view, one Dean has to be fully dedicated to faculty matters.

Similarly, there are new areas which require immediate and particular attention like greater and more efficient use of modern technology in the various activities of the IITs than what is prevalent in the IITs today. IITs have embraced IT tools better than most academic institutions. Even so, there is substantial room for improvement in this respect in every sphere of IIT activities including administration, personnel matters and finance. A robust management and manpower information system will be an asset to every IIT. These aspects together with the activities pertaining to the use of ICT in education, described in Chapter 12, require the leadership of a Dean.

We have also emphasised in this Report the desirability of enlarging attention to IPR issues in order to bring intellectual property assets to the IITs and this would also require a leadership role to be played by a senior academic like the Dean.

These observations are made for the consideration of the IIT Directors and the authorities to see how best the administrative structure may benefit from attending to the suggestions made above.

Table 5.1: Number of Deputy Directors and Deans in IITs

INSTITUTE	DEPUTY DIRECTORS	DEANS Number	Areas*
1. IIT Bombay	1	7	(RM; R&D; Faculty; Students: Alumni & IR; Planning & AP)
2. IIT Delhi	2 (Faculty; Admin)	5	(Alumni & Intl; IDR; PGS&R; UGS; Students)
3. IIT Guwahati	1	3	(R&D; Academic; Students)
4. IIT Kanpur	1	5	(Faculty; Resource Planning & Generation; R&D; Academic; Students)
5. IIT Kharagpur	1	8	(Academic; Alumni; CE; F&P; PGS; SRIC; SA; VGSoM)
6. IIT Madras	0	6	(ICSR; Planning; Students; Academic (2): Courses and Research; Administration)
7. IIT Roorkee	0	6	(Administration; Faculty; SRIC; PGS&R; UGS; Students)

*RM: Resource Mobilisation, R&D: Research and Development, IR: International Relations, AP: Academic Programmes, Intl.: International Affairs, IDR: Industrial Development and Research, PGS&R: Post-Graduate Studies and Research, UGS: Undergraduate Studies, CE: Continuing Education, F&P: Faculty and Planning, PGS: Post-Graduate Studies, SRIC: Sponsored Research and Industrial Consultancy, SA: Students Affairs, VGSoM: Vinod Gupta School of Management, ICSR: Industrial Consultancy and Sponsored Research.

5.3   SUMMARY OF RECOMMENDATIONS

1) No amendment to the IIT Act is envisaged.

2) In the present Committee's view, there is a need for setting up of an empowered PAN-IIT Synergy Committee reporting to the IIT Council. A Committee of this nature is needed for the purpose of deliberating on such matters as have a bearing on the functioning of the whole group of IITs. The composition of such a Committee is also suggested. This Committee can help MHRD in evolving, at an apex level, cooperative approaches with the Ministries of Science and Technology and Communication and Information Technology for enhanced funding for research, for IP matters and in the IT area.

3) A new procedure for selection of Chairmen and Members of Boards of Governors as well as Directors is suggested.

4) The position of Deans needs to be formally recognised in the Statutes of the IITs wherever this may not have been done.

5) The importance of Dean (Faculty) has been stressed in the next Chapter. Deans for IT and IP matters should also be considered.