



सह वीर्यं करवावहे

IETE NEWSLETTER

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FROM PRESIDENT'S DESK

Greetings and good wishes for a happy and prosperous new year to all our readers.

Recalling the wide ranging events of 1996, I note with satisfaction that IETE has significantly advanced towards the goals envisioned by our founders. In particular, we can look back at Multimedia' 96, Annual Technical Convention' 96 and the Mid-Term Symposium' 96 with a sense of real achievement.

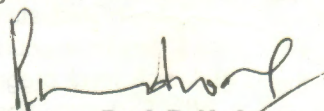
While on the threshold of 21st Century, the Council in its wisdom thought it relevant to look back, take stock of our past experiences and then with a view to futuristic needs, draft out a revised Vision Document. I am glad to inform you that after a prolonged and serious deliberations by the Council, "IETE Vision" has been finalised and issued. We have now a well defined mission towards which all our future activities will be directed, enabling IETE to enter 21st century with confidence.

Members may like to know that the Council has approved the setting up of IETE National Forum, an apex body that would facilitate closer and more objective interaction amongst policy makers and implementors. First meeting of the forum is scheduled to be held in Feb' 97 and will be presided over by Chairman, Telecom Commission.

I am certain, with the cooperation and dedication of all our members we will maintain and accelerate the momentum of our activities during the year 1997.

Wishing you once again all the best for the year 1997.




Prof R K Arora

*Greetings and Best Wishes from
the Institution for a Happy
and Prosperous 1997*

News from Headquarters

ITU Secretary-General visits IETE

IETE was honoured with a visit from Dr Pekka Tarjanne, Secretary General, ITU, on 16 Jan 1997. Addressing a gathering of Council Members, invitees and the staff from IETE Hqs, Dr. Tarjanne expressed his great pleasure to be amongst friends and colleagues in the profession who shares the common responsibility of making telecom a fundamental right of every citizen in this world. ITU's main task is to promote telecommunication and thereby ensure that the development gap between the information "haves" and "have-nots" becomes narrower. Dr Tarjanne visualises that at least in the respect of tele-density, the gap is narrowing, however, new gaps will open up, e.g. the value added services. India as a developing nation with a large base of highly professional technical work force, shoulders a great responsibility to work towards global parity in telecom. He emphasised that professional bodies like IETE with a significant member base, need to make sure that technology is harnessed in the best interest of mankind.

Talking about ITU's catalytic role, Dr Tarjanne said that ITU's strength lies in its membership and the knowledge it has about the expertise available in different

parts of the world on aspects like liberalisation of economies and telecom regime, the consequence of convergence of computers, communication and the media, privatisation, creation of new legislations etc. Telecommunication and its availability in any country is dependent on political decisions and ITU can offer different kinds of models along with background materials, statistics, and judgements that can be suited to particular nation's need. On being quizzed about the secret behind China's success in telecom, he said that in his perception, the key reason is the Govt's will to accord priority to telecom and hence facilitate an atmosphere that is conducive for growth.



Dr Tarjanne addressing the Council. Seen alongside is Prof R K Arora

On the role of ITU in assisting developing countries in bridging the telecom gap, the Secy. General was of the view that only the least developed countries require ITU's or any other external agency's direct intervention on implementation and financial aspects. World Tel, an independent and wholly commercial venture under ITU, is doing a commendable job in this direction.

Dr. Tarjanne who is an Hon. Fellow of IETE, concluded his address thanking the Institution for providing an opportunity for interactive discussion with the Council. Earlier, Prof R K Arora introduced IETE to the Secy General and outlined the various activities undertaken by the Institution for advancing the profession in the country. Brig SVS Choudhary (Retd), Past-President IETE, proposed a vote of thanks.

IETE Council Meeting

The council of IETE met on 15 Dec '96 at Science City Complex, Salt Lake, Calcutta. It was the Calcutta Centre Chairman, Gp. Capt (Retd) M Mukutmoni's special efforts that enabled the use of this excellent premises for this purpose as well as for the 2nd J C Bose Memorial Lecture, even prior to its formal inauguration. All the Committees met as well on the 14th Dec '96. Some of the salient points of the decisions and outcomes of discussions are given below for the information of members.

(The next meeting of the Council will take place on 2 Feb' 97 at Kathmandu, Nepal)

IETE-Vision Document

At the close of 20th century, IETE felt the need to relocate into the vision statement of the Institution. Although the major crux of our activities remain unchanged, the thrust areas and action plans have taken on a new complexion in the view of the fast developing technology scenario. The Council approved the draft of the vision document. This being reproduced verbatim elsewhere in this issue.

Maj Gen K B Jhaldiyal, AVSM (Retd) has assumed office as the Secretary IETE w.e.f. Nov' 96. He is an engineering graduate (BE Electrical) from Roorkee University and has MTech degree in Applied Electronics from IIT Bombay. He retired from active service in the Indian Army (Corps of Electrical and Mechanical Engineers) in Oct' 95.

Council Elections

The Call for Nominations against the seven vacancies arising in the Council by Sept 30th, has been mailed to all members.

The Council also decided that in case the President for 1997-98 is elected out of the non-retiring members, the eighth vacancy in the Council will be treated as casual vacancy. It will be filled by a member obtaining the next highest total votes in the waiting list. In case of all casual vacancies, the tenure of the member would be only as long as the vacating member/office bearer would have otherwise served under normal circumstances.

IETE National Forum

The Council had approved in its previous meeting the setting up of a National Forum comprising of top-level decision makers from a wide spectrum of disciplines including Electronics/Telecom/IT (from the industry & academics, Govt, media, finance, bureaucracy, politics etc.) who would meet from time-to-time to deliberate on aspects that require an objective forum for evolving the right perspective. IETE as a host would then be able to help the decision making machinery with the feedback obtained from this forum. The Council in this meeting drew out a tentative list of representatives for this forum. The Forum's activities would be included in the IETE Newsletter for the benefit of members.

New Courses-Proposals

The following are the new proposals on setting up of part-time courses:

- (i) Post-Graduate Course in Telecommunications: A three years part-time course equivalent in its course contents to an MTech level programme.
- (ii) Part-time Post-Graduate Diploma in Telecom Management: Two years part-time course.

(iii) MTech level course in Software Engineering: The proposal is under consideration by the AICTE.

New Awards

New awards to honour individuals and organisations who have made outstanding contributions to the growth of Electronics, Telecom and IT disciplines, have been mooted by the Council. This would be apart from the existing awards that honour contributions of more academic nature.

These will be formalised after the details on mode of administering the awards have been finalised by the Council.

Improvements in Publications of IETE

Efforts are on to improve the quality and appearance of the Journals. In particular, the Technical Review would carry more of general interest articles, state-of-the-art-reviews and data of actual reference value, etc. The Students Journal is also incorporating new features to make it more useful to the IETE students.

Members may notice that from 1997, all journals would be of uniform A4 size with new cover designs. The names would have uniformity as well, all beginning the "IETE". The **IETE Technical Review** would be called the same but the Journal of the IETE would be known as **IETE Journal of Research** and the Student Journal as **IETE Journal of Education**.

IETE Information Brochure

Limited copies of redesigned IETE information brochure has been released and this is currently under review. The final version is expected to be available soon.

Changing Atmosphere: 2nd J C Bose Memorial Lecture

"Global changes in atmosphere" is a megascience involving multiple disciplines, multiple countries and today, there are major international protocols constraining development programmes that are detrimental to global atmosphere, said Prof A P Mitra, FRS, Hon. Scientist NPL and Senior Homi Bhabha Fellow while delivering the 2nd **IETE J C Bose Memorial Lecture** at Science City Complex, Salt Lake, Calcutta on 14 Dec'96. Readers may recall that our institution had initiated this new lecture series in the honour of Sir J C Bose in 1995, the year which also marked the centenary celebrations of wireless communications. Prof Mitra paid encomiums to the genius of Sir J C Bose and ventured to opine that had Sir Bose continued the work he had initiated in millimeter wave generation and studies on its properties and applications, perhaps the entire course of evolution of radio science might have had a different complexion. And perhaps the 30 year gap between his studies and the next significant work on ionosphere in 1920 by Sir Appleton could have been circumvented!



Prof R K Arora presenting a silver salver to Dr A P Mitra

Prof Mitra's speech was an eye opener for the audience, on a subject that is so much in focus of international eye. The subject of ozone hole, global warming, the Montreal Protocol on phasing out of the CFCs, halons & methyl bromide etc were discussed giving an enlightened view of the processes, causes and consequences of global changes in atmosphere. His speech also highlighted the shifting emphasis in the atmosphere studies, the latest being the integrated approach involving the lower and upper atmosphere, the stratosphere and the ionosphere. It was heartening to be informed that India is no major contributor to the ozone depletion and that by the virtue of being on a low latitude already, have a lesser blanket of O₃ and hence, genetic immunity to an extent, to UV rays.

A complete text of his speech would be appearing in one of the future issues of IETE Technical Review for the benefit of the Members.

IETE-CASET

The following courses were conducted by the Centre from July '96-Dec' 96:

- Pollution monitoring & control, July 2-4 '96 at IETE CASET, Hyderabad
- EMI/EMC standards and design techniques, July 11-13 '96 at IETE CASET, Hyderabad
- Neural networks, Dec 16-18 '96 at IETE Ahmedabad.

The executive courses planned for 1997 as under:

- Fibre optics/photonics, Jan 9-11, 1997 at Hyderabad.
- Image processing & pattern recognition applications, Feb 10-15, 1997 at NRSA, Hyderabad.
- Operator training on power station simulator at ECIL, Hyderabad.
- Access to Internet through NICNET, NIC, Hyderabad.
- CAD for architects & planners, at IETE-CASET, Hyderabad.
- Expert systems & image processing for medical diagnostics, at IETE-CASET, Hyderabad.
- EMI/EMC standards & design techniques, at IETE, Ahmedabad.

Bangalore

The Centre reported the following activities:

- The IETE Students Forum (ISF) was inaugurated at Dr Ambedkar Institute of Technology Bangalore, on 18th Oct 1996 by Prof A Kumar, Emeritus Professor, IISc Bangalore and Chairman, Academic Committee of IETE.



Shri M N Radhakrishna speaking at the workshop on Quality & Safety Certification schemes

Sub D Rajagopal, ISF co-ordinator, briefed the students about IETE and the role of ISF. A technical lecture on **Cellular Mobile Communications** was given by Sri Rajneesh of IISc Bangalore on this occasion. The function was presided by the principal of the college and attended by members of executive committee including Hony Secretary Sri Giridhar R Joshi, Hony Treasurer Sri G Narendra Nath, and Sri Chandra Pal.

- A course on **Digital Communications: Theory and Practice** was inaugurated by Sri S Veluswamy, Scientist E, LRDE, Bangalore on 9th Nov '96. The programme was organized by Sub D. Rajagopal (Retd) in consultation with the ISF at Dr Ambedkar Institute of Technology. Nearly 40 students participated in the programme.

- Sri T H Cowdary (Past president IETE) delivered lecture on **Telecom Technology and Communication System-Developments and Implication** of 27th Nov '96. On this occasion Brig. Seshamani (Retd) and Sri B R Shankara Rao were felicitated as senior Members of IETE whose age + membership exceeded 100.

- A seminar on **Microelectronics** was organized for the benefit of Engineering students on 29-30 Nov '96. Sri R Madhavan, Gp Dir ICG, ISAC Bangalore, inaugurated the function. The convenor was Sri Gopal Sharma Joshi of ISAC. Speakers included Dr Ravindra, and Dr L Narasimhan, ISAC; Sri Loganathan and Sri Prabhakar Rao, BEL, Bangalore

- A one day workshop on **Quality & Safety Certification Schemes** was convened and inaugurated by S M N Radhakrishna, Addl Dir, BIS on 14 Dec '96. The faculty consisted of representative from UL (USA), BIS, ETC and LSCO

- A get together of old and new students of NORA was organized on 21 Dec '96. AS Murphy (AVM) Course Director, NORAD, addressed the students.

- A one day tutorial on **Information theory and Coding** by Sri S Veluswamy of LRDE Bangalore was organized on 25 Dec '96. Sri P Kailasnath, Chairman presided.

Cochin

The Centre successfully conducted one day seminar on **Testing Instruments for PCB**. The programme was conducted jointly by M/s QMax International and IETE Cochin Centre. M/s QMax gave a live demonstration and presentation of QMax 200 PCB testing equipment in which 3 delegates participated. The participants were provided opportunity to work on the equipment and the programme was well appreciated by all.

Hyderabad

The IETE Hyderabad Centre extended their full support to the C-DET programme conducted during 12-14 Sept '96 on **Circuit Theory**.

The IETE Hyderabad Centre under the joint auspices of the Instrument Society of India, Hyderabad Chapter, organised a lecture on **Science and Technology in Vedas and Sastras** by Shri R V S S Avadhanulu, Dy Director, Nizam's Institution of Medical Science on 9th October, 1996.

On 7th of October 1996, in the series of training courses being organised by this Institution for the AIR/DD Officers,



Prof Sampath delivering the Madan Mohan Endowment Lecture

the inauguration of the course for the 12th Batch of 16 trainees drawn from various states in **Digital-cum-Microprocessors** took place. The valedictory function was arranged on 25th October, 1996. Shri Lalit Mathur IAS, Principal Secretary to Government of Andhra Pradesh was the Chief Guest.

On 25th of October, 1996 the IETE, Hyderabad Centre along with the Centre for Telecom Management and Studies, Hyderabad, organised a talk by Prof Keith Bergelt of University of California, San Francisco on **Telecom Infrastructure for Economic Development**. Prof Bergelt in his lecture dwelt mainly on the vast opportunities available for economic development in the telecom industry under private management in the developing countries, India in particular.

The fourth M Madan Mohan Endowment Lecture was conducted on 2nd November, 1996. Prof S Sampath, Ex-President, IETE, former Director, IIT Kanpur and former Vice-Chancellor, Sri Satya Sai Institute of Higher Learning, Prasanthi Nilayam, Puttaparthi, delivered a very interesting lecture on **Science, Ethics and Values-The Quest for Synthesis**. The programme was well attended by the members and other invitees.

Kanpur



Workshop on Internet. Seated L → R are Shri R K Kalra, Shri B B Singh, Prof V Sinha, Shri A K Purwar and Prof K R Srivathsan

A training programme on Internet was organized at Hotel Landmark, the Mall, Kanpur by the Centre in association with Department of Telecommunications and Videsh Sanchar Nigam Ltd., on 26-27 Oct '96.

The programme was inaugurated by Prof V Sinha, Deputy Director, IIT, Kanpur. Dr K R Srivathsan, Prof, Dept of Electrical Engineering, IIT Kanpur, gave a brief history of the data communication and data-networks, Sri R K Kalra, DGM (SWC), VSNL spoke on the various VSNL services including Internet, Sri Pradeep Bharadwaj, Manager (Internet), VSNL introduced the participants to internet with historical perspectives and insight to various applications. Sri A Roy from Dept of Electrical Engi-

neering, IIT, Kanpur covered the concepts of network and protocols. Sri Pirama Nayagam and N Ray from VSNL explained the various parameters concerning modems and peripherals and related facilities which can be made use of through the internet. The officers from VSNL and DOT also arranged demonstrations to the participants on the working on internet through the operating terminals of TCP/IP and shell type of connections. On the concluding day, a question-answer session was also organised in parallel to practice session by DOT officers—Sri B B Singh and Sri Amit Kumar. The sponsor of the programme was M/s Koshika Telecom Ltd.

Mankapur

The centre organised a function for introducing newly constituted Executive Body on 22.6.96 followed by a Seminar. Speeches by Shri N S Gill, GM (QA) DOT, New Delhi and address by Sri N K Mangala, DDG, DOT, New Delhi were the highlights of the day. One of the topics covered in the speech by Sri N S Gill was **Emerging Trends in Subscriber Access Technology**. He shared his views based on his recent visit to various foreign countries.

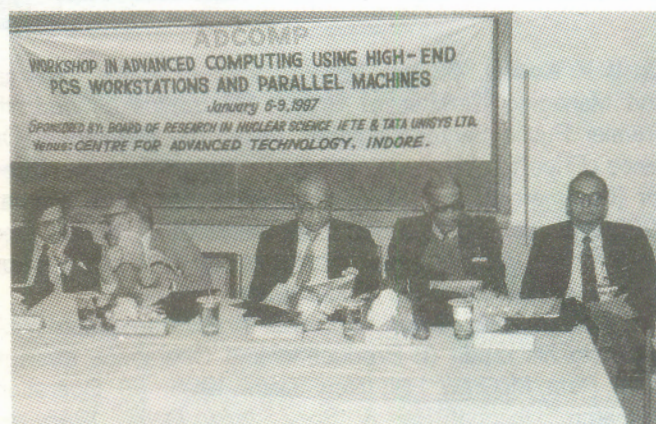
Mhow

The Annual General Meeting of the Centre was convened on 22 Sep 96 under the chairmanship of Maj Gen S D Singh and attended by several corporate and students members. After carrying out the review of activities, election for new office bearers were conducted. The following members were elected to the Executive Committee

- (a) Brig S Nambirajan —Chairman
- (b) Lt Col Arun K Lal —Hony. Secretary
- (c) Shri R P Sharma —Hony. Treasurer

The following technical programmes were co-sponsored with MCTE, Mhow

- A presentation by Maj Gen Yashwant Deva, AVSM (Retd) on **National Information Infrastructure** on 8 Nov 96.



ADCOMP session in progress. Seated L → R: Shri H K Kanra, Dr B A Dasannacharya, Dr S Ramani, Dr P C Sharma and Dr D D Bhawalkar

- Lecture on **Wireless Local Loop** by Dr Ashok Jhunjhunwala, IIT Madras on 9 Nov '96
- Lecture on **Data Security** by Mr N Krishnan Moothathu, Dir, Joint Cipher Bureau on 22 Nov '96
- Lecture on **Image Processing** by Professor UB Desai, IIT Bombay, on 2 Oct '96
- Lecture on **Digital Switching** by Prof Vishwanath Sinha, Dy Director, IIT Kanpur on 10 Jan '97.

A workshop on **Advanced Computing (ADCOMP)** using parallel machines and high end computers was organised at CAT Indore from 06-09 Jan '97, and another workshop on JAVA by CAT, Indore and cosponsored by NCST Bombay was organised at the Centre on 10-11 Jan '97.

Mumbai



Seminar in progress. Seated L → R: Shri Vimal Wakhlu, Shri H P Wagle, Shri Gilbert Krebs, Shri S Anantharaman and Shri K J Chacko

The annual convention of the Centre on the theme **Liberalisation of Telecommunication & Broadcasting: Prospects & Problems** took place on 19-20 Dec 96. The venue was World Trade Centre, Cuff Parade, Mumbai. The key-note address was

by Shri HP Wagle, former Chairman, Telecom Commission, Govt of India. It was inaugurated by Mr Gilbert Krebs, French Trade Commission, Mumbai and the Chief Guest was Dr Snehata Deshmukh, Vice-Chancellor, Mumbai University. There was six sessions on (i) Deregulation-views and issues, (ii) Basic services, (iii) Airwaves-Deregulation, (iv) Value added services, (v) Satellite and cable television and (iv) Mobile services. About 19 papers were presented during the two days. Mr K J Chacko, Vice-Chairman, Mumbai Centre proposed the vote of thanks.

New Mumbai

The IETE Students Forum ISF has been functioning in Bharati Vidyapeeth College of Engg, New Mumbai since Jan 1996 with 103 members. The managing committee comprising of six student members including the Chairman & Hony Secretary of the centre have been duly elected.



Shri S C Tiwari addressing the students at ISF, Bharati Vidyapeeth College of Engg

The ISF has been active and conducted a seminar on **Networking Technologies** on 11th Sep '96.

DISTINCTIONS

Dr V K Koshy, 53 has been appointed as the Chairman and Managing Director of Bharat Electronics Limited, the premier Public Sector Company under the Ministry of Defence. Prior to this appointment, Dr Koshy was the Director (Commercial and Management Services) since February 1993 and was on the Board of Directors of Bharat Electronics. He was also the Chairman of the joint venture company BE-Delf, Pune since 1994.

Dr N G Nair, Fellow IETE has three monograph publication to his credit (i) Production and Operations Management, Tata McGraw Hill, New Delhi 1995, (ii) Operations Research, Dhanpat Rai & Sons, New Delhi, 1995, (iii) Management System, S Chand and Co, New Delhi, 1996. Dr Nair is a post-graduate in engineering with a doctorate in management. He has over 30 years of experience in

academic and industry environment. He has been recognised as a National Expert of Management by Ministry of Science & Technology, Govt of India from 1990 onwards.

Shri D Ravi Kumar, (Membership Number SG 096127) AMIETE Council Prize Award Winner, December 1995, has secured admission for MTech course in Banaras Hindu University. He has sent us valuable suggestions in respect of AMIETE curriculum and syllabus. We gratefully acknowledge the same and wish him all the success in his career.

Dr S Pal, Gp Dir, Communication System Group, ISRO Satellite centre, Bangalore has been conferred the NRDC Award for his innovative contribution titled "Wide L & C Antennas for a Remote Controlled Aircraft". The Award Ceremony took place on Republic Day, 1997.

Editor's Musings

Vision is the latest buzzword in the lexicon of every institution, profession, government and non-government organisation, profit and non-profit sector. It has become fashionable to flaunt the leitmotif. Not to be outdone, the IETE, too has one to intonate, a reiteration of what the institution is supposed to do, or better, what it should have done during the forty odd years of its existence.

Normally, visions are space and time bound, we couldn't be constrained by either and opted for "beyond the horizon." The year 2,000 is too close and the 2,100 too distant. Had we chosen either, we would have been accused of suffering from acute myopia or inflated presage. Herin lay the rub, further compounded by the paradox that naming a year in-between the two nubs of the Century, neither symbolizes the aspirations, nor sounds impressive. So the consensus acknowledged, and rightly too, that the year of vision-reckon is immaterial to lending the Institution a perspective.

One of its architects, a past president of the Institution, did a SWOT analysis. His scathing critique and salty reflections were the best part of the exercise. His observations were pertinent indeed. These were a candid tally of the pluses and minuses of our past and gave a sharp focus to "whither IETE" and its societal relevance. The debate was brilliant, the suggestions ingenuous; but somewhere in crossing T's and dotting I's, we emphasized the obvious and ducked the ideal. Like the Common Minimum Programme of the Janta Government, it became an exercise in finding LCD and the phraseology to match it.

All this is not to suggest that the document is any lesser in its import. On the contrary, it is a paragon with much substance, a constant reminder to what we should be doing. Its merit lies in being concise and devoid of verbiage, so ubiquitous in similar mission aphorisms.

S&T is a dominating power in today's world. Its ignorance is a curse, yet a sizable proportion of our fellow countrymen are outside the ambit of three R's let alone S&T. We belong to a seminary of elitist technologies, what we call the Discipline—a culling of telecommunications electronics and IT. This then is our icon and cross; the latter to remind us of burden to enrich the Discipline and social obligation to take it to the masses.

Our founding fathers, undoubtedly, nourished a vision; but it was coloured by the industrial age; whereas the vista we envision is that of the information age. Obviously, their task was more difficult and praiseworthy. The Third Wave is a consequence of the "discipline" that we plume. Now there are opportunities galore for the institution to blossom. Yet, we have not made a mark in public consciousness, the media or the scholarly research. The document spurs us to that end.

In a article on "The Rise of the Nonprofit Sector" which appeared in July/August 1994 issue of the *Foreign Affairs*,

Lester N Salamon talks about a "global associational revolution" and "rise of a third sector," described as "a massive array of self-governing private organizations, not dedicated to distributing profits to shareholders or directors, (but) pursuing public purposes outside the formal apparatus of the state." The role fits us eminently. Ours is a third-sector institution, cognizant of the limitations of an overloaded, over-bureaucratized government in performing technology-relevant missions and reluctance of the profit-conscious private sector to commit resources for public good, research or HRD.

For all its dynamism, the IETE remains vulnerable to a variety of pressures, ranging from internal tensions to external constraints. The long and short of our vision is an abiding commitment to social service and grass-root activities, and ensuring that the vision does not get clouded in petty squabbles and selfish gains.

There are high expectations from the IETE. "Among the laws that rule human societies," Alexis de Tocqueville wrote 150 years ago, "there is one that seems more precise and clear than all others. If men are to remain civilized or become so, the art of associating together must grow and improve in the same ratio in which the equality of condition is increased." And do says our motto, *Saha Veeryam Karavahai*.

Yashwant Deva

What it Takes to be a Good Member

On the suggestion of Prof. PV Indiresan, our Past President, the Council has approved *सह वीर्यं करवावहे* as the motto of the institution. Literally translated it means "Let us do great things together". Claus Møller, the founder and CEO of Time Manager International (TMI), has coined a word called "Employeeeship" for corporate world. As leadership signifies "what it take to be a great leader", he defines Employeeeship as "what it takes to be a good employee". I propose, in line with above approach, to coin a word called "IETeship" which means "what it takes to be a good member of IETE".

Having coined the word, I propose to draw the chart of Can & Will as has been done by Claus Møller.

		CAN	
		NO	YES
WILL	NO	Members who just pay the fee and have nothing to do with activities	Not motivated to come forward to strengthen IETE
	YES	Attend lectures, meetings, takes part in AGM	Recognises the role of IETE and spread the cause of the institution

For the overall development of our institution it is necessary to transform as many as possible of membership to the category of both "Can & Will". Let us now discuss what needs to be done to create the category. Some of the necessary ingredients are:

- Personal Commitment
- Motivation
- Team Work
- Quality of Work (both hard quality i.e. technical quality and soft i.e. human quality)

A good citizen obeys the laws, helps others, respects and has consideration for other people, does not take advantage of his position of influence. Likewise, a good member contributes to the success of the Institution. We Corporate Members must collectively work to further the cause of the discipline we serve. A good member:

- is deeply committed to the objective of the institution.
- is a member willing to volunteer time for the cause of institution.
- is loyal
- feels responsible to improve financial health
- is helpful and co-operative across the organisation
- feels responsible to add to the strength of the institution
- is proud to be a member

Summing up, it can be said that responsibility, loyalty and initiative are some of the essential elements of "IETeship"

Traditionally a company's problem and opportunities are seen through the eyes of the management. Likewise IETE's problems and opportunities are seen through the Executive Committee of the Local Centres and the Council. Whilst a large number of books have been written on management technique and role of managers, role of the employees (as in our case) have hardly been defined and emphasised. Clause Møller states that people feel responsible and act responsibly when they

- have something to take responsibility for
- are aware of the goals
- feel that they can influence the situation on the way towards achieving the goals.

A loyal member is proud to be part of the organisation. Initiative is closely linked to implementation. It means moving from idea to action, moving from what to "who, how and when".

Having dealt with responsibility, loyalty and initiative, let us dwell upon the role of the management. Real role of management is to remove obstacle, motivate, empower and above all to define the goal and publicise it. You cannot be committed to what you are doing, if you cannot see a good reason for doing it. Let us remember that whatever is worth doing, is worth doing well. I call upon each member of IETE to practice what I have called IETESHIP. Let us resolve to do great things together.

Y P. Singh, Chairman, Publications Committee

IETE-VISION DOCUMENT

IETE Mission Statement

The Institution shall:

- ☐ Dedicate itself to the vision of the founding father and strive for the advancement of the Discipline of Electronics, Telecommunications and Information Technology.
- ☐ Bring together policy makers, policy implementors, academicians, researchers, practicing engineers and industry professionals for the advancement of the Discipline for the benefit of society at large.
- ☐ Be the prime voice of the Discipline in the evolution of national policies.
- ☐ Promote and maintain code of ethics for high standards in the Profession.

Objectives

The objectives of the Institution shall be to:

- ☐ Organise conference, symposia, workshops and brainstorming sessions involving all concerned professionals, students and industry associations for the advancement of the Discipline.

- ☐ Provide a forum for discussion on national policies and to provide suitable inputs to policy makers.
- ☐ Promote and conduct basic engineering and continuing technical education programmes for human resource development.
- ☐ Stimulate research and development in the Discipline.
- ☐ Facilitate formulation and implementation of national standard for products and services in the Discipline.
- ☐ Enlarge membership base and provide facilities to members to update their professional skills.
- ☐ Bring out quality publications for all levels of readership.
- ☐ Honour outstanding professionals.
- ☐ Organise resource centres and databases.
- ☐ Facilitate inter-disciplinary interaction with other organisations and individuals within and outside the country for the promotion of the discipline.
- ☐ Develop the Institution's infrastructure at various centres and expand their activities.

World Telecom Policy Forum on MSS

To discuss and exchange views and information on policy and regulatory issues raised by global mobile personal communication by satellites (GMPCS), the ITU's first World Telecom Policy Forum (WTPF) took place from Oct 21-23, 1996 in Geneva. It was attended by 1061 delegates from 129 countries, member states and ITU sector members. WTPF took a broad view of the issues raised by GMPCS as being applicable to all satellite systems (fixed and mobile, broadband and narrowband, global and regional, existing and planned: GEO MSS, little LEO or little NGEO MSS, MEO and HEO).

The main issues were the cost of MSS telephone calls, estimated cost of telephone sets (\$ 750 - \$ 3000), regulatory problems, equipment approval and market access. The situation can be best analyzed by the claim of Teledesic which promises to bring fibre like telecom services worldwide. It will be broadband "network in the sky" using 840 satellites and will offer countries the possibilities to extend their network world wide through ground based gateways.

While developing countries agreed that an early implementation of GMPCS worldwide will allow people to share their benefits and will permit further global communication development, several countries expressed concern about their sovereign rights and national legislation and priorities.

In order to move forward, the Forum has adopted a set of

voluntary principles addressed to national policy matters and regulators, the purpose being introduction of GMPCS by maximising the benefits and fulfilling each country's needs.

The ten principles are:

1. Early introduction
2. International cooperation
3. Global service availability
4. GMPCS regulators
5. Investment participation
6. Unauthorised use
7. User terminal & free circulation
8. Universal access

These voluntary principles approved by all delegates will guide the national policy makers, GMPCS operators and system providers in the introduction of new technology. A more formal form of the above principles is reflected in the MoU reproduced later.

The revised MoU has been circulated to all parties involved with an invitation to comment by 31-12-96. In early '97, an informal group will consider the comments received and finalise the MoU.

There was stress on the importance of completing the initial set of agreements by 1-7-97 and to have as many signatories as possible in order to consider further actions before Oct '98 plenipotentiary conference of ITU in Minnaepolis.

DRAFT

Memorandum of Understanding to Facilitate the Free Circulation of Global Mobile Personal Communications by Satellite User Terminals (GMPCS-MoU)

Convinced of the need to reach regional, and preferably global, arrangements on issues related to the three levels of free circulation of user terminals defined as follows:

- permission to carry a terminal into a visited country but not to use it;
- permission to carry a terminal into a visited country and to use it without the need for obtaining authorization in the visited country; and
- technical conditions for placing terminals on the market;

that such arrangements would necessarily include the conditions pursuant to which Administrations would grant mutual recognition of type approval to terminals, mutual recognition of terminals licensing, recognize the marking of terminals, and permit terminals to be placed on the market; and that such arrangements could form the basis of national regulations on these matters, or be implemented by reference;

the Parties to this Memorandum of Understanding hereby agree to cooperate, according to their respective roles and competencies and taking into account the voluntary principles of GMPCS adopted by WTPF 96 on the following issues;

Article 1 Type Approval of Terminals

The parties shall develop arrangements on the essential requirements necessary for the type approval of terminals, and the means by which such approvals shall be mutually recognized. That the type approval standards should be based on the relevant ITU Recommendation, and should be impartial with respect to all GMPCS technologies, and without reference to performance or quality of service standards.

Article 2 Licensing of Terminals

The Parties shall develop arrangements on the means by which licenses should be granted based on general licenses (e.g. class licenses or blanket approvals). That such arrangements shall be drawn up and include the means by which these general licenses shall be mutually recognized.

Article 3 Marking of Terminals

The Parties shall develop arrangements on the marking of terminals which will permit their recognition and the implementation of the arrangements on mutual recognition of type approval and licensing.

Article 4 Customs Arrangements

The Parties shall develop recommendations to their competent authorities proposing exemption of approved terminals from customs restrictions when visiting or transiting countries.

Article 5 Review

The Parties shall periodically review the results and consequences of their cooperation under this Memorandum of Understanding. When appropriate the Parties will consider the need for improvements in their cooperation and make suitable proposals for modifying and updating the arrangements, and the scope of their GMPCS-MoU.

Article 6 Access to Traffic Data

The parties shall develop arrangements for GMPCS operators to provide, on a confidential basis, within a reasonable period of time to any duly authorized national authority which so requests, the best available traffic data concerning traffic originating in or routed to its national territory, and to assist it with any measures intended to identify unauthorized traffic flows therein.

(Courtesy: Pacific Telecommunications Review/December 1996)

World Telecommunication Day May 17, 1997.

The theme of this year's celebration is **"Telecommunications and Humanitarian Affairs"**

The focus will be the vital and growing link between telecommunications and emergency relief operations which follow natural and man-made disasters such as cyclones, earthquakes, or wars.

IETE will celebrate the day with specially organised function at all the local centres and the Headquarters. Members are invited to participate actively.

The many different aid agencies working around the world have long relied heavily on telecommunications, both to keep in contact with disaster-struck areas, and to co-ordinate their own activities. Radiocommunications, in particular, is a mainstay of many emergency relief operations, because of its high level of reliability, the portability of equipment and its high disaster-survival capability.

Today, as well as tried and tested communications systems such as radio, developments in technology have yielded other alternatives which can benefit disaster victims and field workers alike in coping with the aftermath of a catastrophe.

Mobile telephony, because of its convenience and easy portability, has already become a great working tool in the field of humanitarian aid. Mobile phones can be used to get information to victims, and are indispensable aids for relief workers, who are able to co-ordinate team activities while in the field, and quickly mobilize emergency actions such as evacuations. Whilst they will never replace radio in certain situations, their ability to provide continuity of communications despite localized damage to the ordinary telephone network have made mobile telephones a great boon in the effort to manage disaster damage.

Where there is widespread loss to the local telephone service, making even mobile telephony unviable, new kinds of systems currently under development have the potential to be of great help.

Telecommunications systems based around constellations of Low and Medium-Earth-Orbiting satellites, due for launch over the next five years, bring with them the promise of global mobile telephony, regardless of the whereabouts of the user, or even the existence of on-the-ground telecommunications infrastructure. When fully implemented, they could prove to be a great asset in the effort to save lives and ease the suffering of those affected by large-scale disasters.

In order to enable the benefits of these new technologies to be available as widely as possible, the ITU is working with other international organizations, notably the United Nations Department of Humanitarian Affairs, to create a new Convention covering the international use of emergency telecommunications. This Convention, which has already been accepted by the ITU Council, is now expected to be adopted at an international conference later this year.

To celebrate World Telecommunication Day 1997, the ITU has contacted a range of locally-based agencies involved in the field of humanitarian affairs, with a view to mounting joint projects. The 187 Member States of the ITU will commemorate World Telecommunication Day at a national level, implementing individually developed programmes to suit each country, and taking advantage of the involvement of local aid agencies, if desired.

Delhi Centre Building: Appeal for Donation

The construction of the IETE Delhi Local Centre building commenced in 1993 is presently halfway through. There is an acute shortage of funds for completion of the project. Contributions in the form of donations are invited to tide over the difficulty. It may be noted that such donations are entitled to tax-exemption under Section 80G of the Income Tax rule.

(Please correspond with Delhi Local Centre)

28Th Mid Term Symposium of the IETE
4-5 April 1997, CSIO Auditorium Chandigarh
100 Years of Electron
Programme Schedule

4th April, 1997 (Friday)

0900-0930
0930-1100

Welcome Address

Introduction to the Symposium

Presidential Address
Inaugural Address
Release of Souvenir

24th Vikram Sarabhai Memorial Lecture:
Vote of Thanks

1100-1130
1130-1300
1300-1345
1345-1600

Key Note Address
Invited Speakers—
Microelectronics

Microwave Electronics
Industrial Electronics

Process Control Electronics

Medical Electronics
MRI/CAT Scan

1600-1615
1615-1745

Key-Note-Address
Invited Speakers—
Optoelectronics
Optoelectronics
(Materials)-

Fiber Optics/Sensors
Photo Dectors
Optoelectronic Sources

2000-2100

Registration
Inaugural Session

Sh. D P Goel, Chairman IETE
Chandigarh Centre

Maj Gen Y Deva, (Retd) Chairman
TPC

Prof R K Arora, President IETE
Chief Guest
Chief Guest

100 Years of Electron
Dr S K Joshi, Ex-DG, CSIR
Dr R P Bajpai, Convenor

Tea
Key note Address
Lunch

**Technical Session-1:
Electronics and Instrumentation**

Prof B S Sonde, IISc, Bangalore

- Prof A B Bhattacharya, IIT Delhi
- Dr P R Apte, TIFR, Bombay
- Dr M J Zarabi, SCL, Mohali
- Dr S N Joshi, CEERI, Pilani
- Dr C Rao Kasarabada, ECIL, Hyderabad
- Dr G N Acharya, Vasantdada Sugar Institute, Pune (VSI),
- Dr I B Raina, ONGC, Dehradun

- Dr Srinivasulu, BHEL, Delhi
- Prof S K Guha IIT Delhi.
- Mr Raveendran Gandhi, Wipro GE Medical Systems Limited, Bangalore

Tea
**Technical Session-II:
Optoelectronics and Photonics**

Dr V K Aatre, DRDO New Delhi

- Prof A K Ghatak, IIT, Delhi
- Prof. B M Arora, TIFR, Bombay
- Prof D N Bose, IIT Kharagpur
- Prof J P Raina, IIT, Chennai
- Dr Vikram Kumar, SSPL, Delhi
- Dr P K C Pillai, IIT Delhi

Cultural Programme

5th April, 1997 (Saturday)

0930-1030

1030-1300

Key-Note Address

Invited Speakers—

Parallel Computing

Signal Processing
Informatics

Networking

Telecom Scenario
in India
Systems

1345-1600

Key-Note Address

Invited Speakers—

Missile Technology
Optoelectronics

Radar & Navigation Aids
Milimeter Wave
Technology

Info-War: Challenges
to Come

1615-1700

12th Lal C Verman Award Lecture
by Shri CL Kaul, Director, ETDC,
Mohali

**Technical Session III:
Info-electronics & Informatics**

Dr N Seshagiri, NIC, New Delhi

- Prof L M Patnaik, IISc, Bangalore
- Prof V U Reddy, IISc Bangalore
- Mr K Vijay Gupta, Tata Telecom Ltd. New Delhi
- Dr K Basant Tariyal, Lucent Technologies India Pvt. Ltd., New Delhi
- Dr S Sunder Thakur, TISL Bangalore
- Mr P K Sandel, Telecom Industry & Serv. Assn of India, New Delhi
- Mr B D Pradhan, Motorola India Limited. New Delhi

**Technical Session-IV:
Defence Applications**

- Dr K G Narayanan, ADE Bangalore

- Dr A S Pillai, DRDO, New Delhi
- Dr O P Nijhawan, Instruments Research & Development Establishment, Dehradun

- Prof R P Shenoy, IISc Bangalore
- Dr A A Bains, DEAL, Dehradun

- Maj Gen Yashwant Deva (Retd) New Delhi

**Technical Session-V:
Panel Discussion and Valedictory Function**

Address for Correspondence

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Tel: 651746, 652021
Fax: 657267, 657082

CALENDAR OF EVENTS

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • XII National Convention of Aerospace Engineers-Aerospace '97 | 5-7 March '97
Trivandrum | J Sankara Iyer, Chairman, Institute of Engineers (India), Trivandrum 695033 |
| <ul style="list-style-type: none"> • Seminar & Exhibition of Plastic Capacitors, Materials & Production Equipment (CAPTECH) | 6-8 March '97
Bangalore | Plastic Capacitors Tech Centre, C/o Solid State System Pvt Ltd, Rahath Bagh. Old Madras Road, Bangalore 560093 |
| <ul style="list-style-type: none"> • 3rd ISSAT Intl Conf on Reliability and Quality in Design | 12-14 March '97
Anaheim, California
USA | Dr Hoang Pham, ROD-97, Dept of Indl Engg, Rutgers University, PO Box 909, Piscataway, NJ 08855 USA |
| <ul style="list-style-type: none"> • CeBIT '97 | 13-19 March 1997
Hannover, Germany | Indo German Chamber of Commerce, Maker Tower E. 1st Floor, Cuffe Parade, Mumbai 400005 |
| <ul style="list-style-type: none"> • 25th Mid-Term Symposium of IETE | 4-5 April 1997
Chandigarh | DP Goel, Chairman, IETE Chandigarh Centre, Sector 30-B, Chandigarh 160020 |
| <ul style="list-style-type: none"> • The 1997 Pan Asia Satellite & Cable Television Conference | 5-8 May 1997
Singapore | Cecilia Ow, Sr, Con Manager, Centre for Asia Telecoms, 12 Prince Edward Road, 03-01 Podium A, Bestway Bldg, Singapore 079212 |
| <ul style="list-style-type: none"> • 2nd Int. Workshop on Telematics | 19-25 May 1997
Nirjuli, Arunachal Pradesh | CT Bhunia, Dean I/C (PGS) NERIST, Nirjuli, Arunachal Pradesh 791109 |
| <ul style="list-style-type: none"> • National Conference on Quality and Reliability (NCQR-97) | 26-28 June 1997
Mysore | Prof M N Gopalan, Dept of Mech Engg, Shri Jaya Chamarajendra, College of Engineering, Mysore 570006 |
| <ul style="list-style-type: none"> • 6th Intl Symp on Recent Advances in Microwave Technology (ISRAT '97) | 4-7 Aug 1997
Beijing, China | Prof Banamali S Rawat, Dept of EE/MS 260, Univ of Nevada, Reno, Nevada 89557-0153, USA |
| <ul style="list-style-type: none"> • 40th Annual Technical Convention of IETE: Internet and India | 30 Sep- 1 Oct 1997
Mumbai | Secretary IETE, 2 Lodhi Road, New Delhi 110003 |
| <ul style="list-style-type: none"> • INSULEC'97: 5th Int. Seminar on Electrical & Electronic Industry Materials & Systems | 27-28 Nov 1997
Bangalore | M B Telang, Org. Secy, IEEMA, 501, Kakad Chambers, 132 Dr Annie Besant Rd, Worli, Mumbai 400018 |
| <ul style="list-style-type: none"> • 5th Int. Conf on EMI/EMC (INCEMIC '97) | 1-6 Dec 1997
Hyderabad | Dr S R Ramaswamy, Convenor INCEMIC 97, Director, AMT, Research Centre Imarat, 306 AVIONICS Vignyanakancha Hyderabad 500069 |
| <ul style="list-style-type: none"> • Broadcast Cable & Satellite India'97. | 8-11 Dec 1997
New Delhi | Prem Behl, Exhibition India C-390, Defence Colony, New Delhi 110024, |
| <ul style="list-style-type: none"> • National Symp. on Ocean Electronics (Sympol-97) | 16-17 Dec 1997
Cochin | PRS Pillai, Co-ordinator, SYMPOL-97, Deptt of Electronics, Cochin University of Sc & Tech, Cochin 682022 |
| <ul style="list-style-type: none"> • Conference on Signal Processing, Communication and Networking (SPCOM '97) | 16-19 Dec 1997
Bangalore | Prof Anurag Kumar or Dr Amamitra Makur, Dept of Electrical Communication Engg., Indian Institute of Science, Bangalore 560012. |
| <ul style="list-style-type: none"> • 9th Intl Workshop on Physics of Semiconductor Devices. | 16-20 Dec 1997
Delhi | Dr S K Agarwal, Secretary, IWPSD-97 Solidstate Physics Laboratory, Lucknow Road, Delhi 110054 |

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