What led to the formation of the Department of Electronics?
MGK Menon: The Bhabha Committee on Electronics was constituted in the wake of the Indo-China hostilities of 1962. Bhabha felt that electronics was a fundamental area from the viewpoint of defence. It was also important for the atomic energy programme. The earliest efforts at Tata Institute of Fundamental Research (TIFR), were connected with building of various types of electronic equipment. We built vacuum voltmeters, amplifiers, analog-digital converters, power supplies and so on. All this was important for cosmic ray research, and then stemming from this nuclear research, equipment required for producing atomic energy, including radiation protection, and control systems for reactors. It gradually grew like this and culminated in setting up of the Electronics Corporation of India Limited (ECIL).

Then the government decided to implement this. So they assigned Prof. M.G.K. Menon was the founder secretary of the Department of Electronics and first Chairman of the Electronics Commission, constituted in June 1970 and February 1971, respectively. In this interview with Dinesh C. Sharma, Prof. Menon spoke about this important development. The interview took place on 4 April 2007 in New Delhi. Here are excerpts from the interview.
this task to the Ministry of Defence Supplies and Production. In 1970, it was felt that there should be a national conference to see how we had progressed till then. It was essentially organised by the Electronics Committee and Sarabhai. In this conference, there was considerable dissatisfaction that it was really government bureaucracy and typical defence ministry approach to electronics. Around this time Sarabhai had many discussions with me; P N Haksar had many discussions with me on this subject. They had the view that the rate at which electronics is developing and growing in its myriad areas of applications, it requires a separate administrative set up. Vikram was already in government as secretary, Department of Atomic Energy and Space. Then Mrs Gandhi took one meeting at the end of which I was clearly asked to take the responsibility of setting up a new structure. I believed that it would be proper to set up a commission, just like the atomic energy commission, if we wanted to develop this sector. This was accepted and I took over as the Chairman of the Electronics Commission.

What was the objective of setting up DoE? Was it meant to be a regulatory agency?
MGK Menon: Electronics is bigger than computers. Somehow it is emphasised that it is the ministry of IT. That is not true. Electronics is a very broad sector. Today there is a lot of criticism of DRDO, largely on account of delays in big projects such as LCA and MBT. But what has been delivered people don’t even realise – radars, communication systems. And we had the responsibility to develop some of these systems from scratch. Air Defense Ground Environmental Systems (ADGES) Plan was essentially delivered by TIFR, ECIL, Nelco, etc. Similarly the Automatic Electronic Switch under the Army Radio Engineered Network (AREN) Plan, for which the basic communication switch came from TIFR, LRDE. This was the switch when combined with the work done by G B Meemansi at TRC was the basis for CDOT. All this was electronics. There is a whole area of strategic electronics – radars, sonars, electronic warfare, microwave and so on. To equate electronics with IT is misleading.

I had no intention of coming to Delhi to sit like an IAS officer dealing with a regulatory mechanism. I was brought up in the tradition of science. My entire approach was promotional. How do you encourage, promote development in this area. So, DoE’s role was not regulatory, but a combination of regulatory and promotional roles.

How did DoE support technology development in electronics?
MGK Menon: We asked for large sums of money to support research, development, and new production ventures. We also looked at licensing policies – how much should we support small scale, etc. We took a lot of new initiatives. If someone bought a computer, it would not be fully loaded and before it is fully loaded it would get obsolete. So, we said, let’s have computers as common facilities. We set up regional computer centres. We started the National Centre for Software Development and Computing Techniques so that capabilities get developed.

Then I asked for a similar system for NIC. I said the government should develop databases on a positive basis. That’s how NIC came up. We also proposed to set up a large computer for engineering applications at NAL. But UNDP did not give funding for this because NAL had worked closely with HAL in wind tunnel experiments earlier, and UNDP feared if a computer is set up at NAL it would be used for defence applications. We supported enormous amount of research and development in radars, sonars, communication, components, materials and so on.

I could push some of these things because I had also become Scientific Adviser to Raksha Mantri in 1974. We supported a number of projects at BEL, LRDE, ECIL, Midhani (super alloys development), ITI, etc. though all these units came under different ministries. We gave research grants across the board to anyone who was good at it. There was a research and training scheme that supported research at IITs, universities, and IISc. The whole concept of state electronics development corporation came from us. If it was properly implemented, it would have been efficient.

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