



The Apex Body Story

CINTEC

The Beginning

Aruni K. Goonetilleke

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This book is based primarily on an interview with
Prof. Mohan Munasinghe.

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PREFACE



This elegant volume is a valuable historical record of the early development of digital technology (ICT) in Sri Lanka -- especially the way in which the Government sector entered the ICT arena. The Computer and Information Technology Council of Sri Lanka (CINTEC), the first Government Apex Body on ICT, was established in the mid-1980s. As Senior Advisor to former President J.R. Jayewardene, I was directly involved in the drafting of the original National Computer Policy and the CINTEC Act of 1984, as well as the operationalization of CINTEC, at his request.

This work broke new ground internationally, since it was among the first such initiatives in developing countries, at the time. These innovative efforts were carried out smoothly and without undue problems due to the dedicated and meticulous work of a team of expert colleagues, who were members of the Presidential Committee on National Computer Policy.

The simple fact that CINTEC guided ICT policy for 20 years in such a rapidly changing field, provides clear proof of the foresight of those pioneers. Aruni Goonetilleke and Prof. Gihan Dias, CEO of the LK Domain Registry, who also played key roles in the field, deserve our gratitude and congratulations for producing this fine publication.

Prof. Mohan Munasinghe

Chairman, Munasinghe Institute for Development (MIND) &
MIND Group

Former Senior Advisor to the President of Sri Lanka

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INTRODUCTION



Ms. Aruni Goonetilleke has been the live wire behind the popular website “History of ICT in Sri Lanka” and the book “How ICT was enabled in Local Languages”. She is now documenting the work done by the Council for Information Technology (CINTEC) in its almost 20 years of developing ICT in Sri Lanka.

This book is the first part of this fascinating story, and describes why there was a need for such a body, how it was set up, and the work done in its first 10 years. It shows that Sri Lanka did not get to where it is today automatically. The vision of and a lot of hard work by many people were needed to bring us here. I trust that you will find this an interesting story. More information on the personalities involved, and some of their success stories, is available on the ICT-History website.

The next volume will continue the story...

Prof. Gihan Dias

Director / CEO / Domain Registrar

Professor at University of Moratuwa

PROLOG

Computerization commenced in the 1960s in Sri Lanka, in both the State and the private sectors. An interesting fact that Mr. Lakshman Hettiarachchi, former Country Manager, IBM, narrates is that IBM came to Sri Lanka way back in 1962 on the invitation of the then Prime Minister. Key sectors of the economy such as banking, insurance, foreign trade and the petroleum industry were nationalized during this period. Consequently, while other international businesses had to leave, IBM was invited due to the fact that when the insurance business was nationalized major issues in handling data relating to insurance policies etc. ensued. Subsequently, data were captured into cards through data entry machines and the cards were sent to India for processing and the results were returned. This was one of the earliest inroads.

Early initiatives

There were many initiatives during the early stages led by several pioneers; the first electronic computer system, an ICT 558, was installed at Walker, Sons and Company. It was used for payroll and inventory control work. The second computer, an ICL 1901S was installed at the State Engineering Corporation (SEC) in 1967. Dr. A.N.S. Kulasinghe, Chairman of SEC during this period, initiated this venture. SEC had excess computer capacity; therefore, SEC undertook computerization projects for other Government organizations. Many are not aware of the fact that the results of the GCE Ordinary Level examination for the entire country were processed with computers from 1968 onwards. SEC also processed the results of the GCE Advanced Level Examinations, and computerization projects of various other Government organizations.

The third computer was the ICL 1901 computer system installed in 1968 at Computer Systems Ltd. (CSL), a subsidiary of Walkers. The fourth computer, an ICL 1901A was installed at AMS Data Services Ltd (AMS), in Colombo. AMS was a service bureau operation, and the Company undertook accountancy projects and work relating to tea auctions, etc.

These were the initial computer installations. The ICT 558 at Walkers was eventually “retired”.

From 1969 onwards, IBM 360 mainframe computers were installed at the Insurance Corporation, the Ceylon Petroleum Corporation and later at the Department of Census and Statistics and the Central Bank of Sri Lanka. Subsequently, the Examinations Department also leased an IBM 360 mainframe computer mainly for in-house processing of the results of the GCE A’ Level and O’ Level examinations.

Computerization at Universities

Computerization commenced early in Universities too. There were IBM 1130s at the Faculty of Engineering, University of Peradeniya under Dr. J. A. Gunawardena and at the Faculty of Engineering, University of Moratuwa. By 1980, Prof. Abhaya Induruwa was in charge of the Computer Center at the University of Moratuwa at which a Computer Library and a Computer Laboratory were set up in 1984. Students could borrow Sinclair ZX Spectrum computers from the Computer Library and use networked Commodore 64 computers in the Laboratory. Prof. V.K. Samaranyake procured an HP Scientific desktop machine for the University of Colombo,

and so did the Postgraduate Institute of Agriculture and the Agricultural Research Training Institute (ARTI).

In 1986, a team led by Prof. Induruwa demonstrated the possibility of connecting to a remote computer by logging into the TRS 80 at the University of Colombo from a similar computer at the University of Moratuwa using UUCP over a telephone line connected to modems with 300 baud (bits per second) speed. This was a milestone. It marked the beginning of the computer networking era in Sri Lanka that led to the establishment of LEARN (Lanka Experimental Academic & Research Network¹) as the data communication backbone to connect all Universities and research institutes. Sri Lankans in various Universities overseas communicated with each other and exchanged information using an electronic mail-based bulletin board and the group was named SLNET - this was one of the very first social media networks.

Introducing computers to schools

Under the direction of the Computer Advisory Committee of the Ministry of Education, a program to introduce computers to schools commenced in 1984; computer labs with Sinclair

¹ Now known as Lanka Education and Research Network

ZX Spectrum computers were set up in schools which had A' Level Science streams. Due to hardware resource limitations, only programming in BASIC (Beginners' All-purpose Symbolic Instruction Code – a high-level general purpose programming language) was taught to school children and 200 teachers were trained for this purpose by the Universities of Moratuwa, Colombo and Peradeniya and DMS Ltd.

Banking sector

The banking sector too, commenced computerization very early. The Central Bank was one of the first banks to use ICT. In the late 1960s, the Central Bank commenced using ICL Tabulating equipment, primarily for EPF (Employees' Provident Fund) accounting functions and printing member statements. Later, an IBM System 360 was used to fully computerize the EPF employee and member account details. During this period the Bank undertook several computerization projects for other institutes too, such as the National Savings Bank (NSB), the Department of Examinations, Air Ceylon and the Textile Corporation. The generation of national ID card (NIC) numbers was another project which the Central Bank undertook during this period.

Later, the systems were upgraded to IBM 4331. In 1985/86 the Bank implemented the first ever passbook printing system in Sri Lanka using an IBM 4700 Financial Communication system linked to the main frame computer. This was used for printing EPF member balances. This initiative of printing a passbook for EPF member balances, was later discontinued. Implementing the Sri Lanka Automated Cheque Clearing House (SLACH) around 1986/87 was significant milestone.

In the 1970s, the Bank of Ceylon (BOC) placed an order for an IBM System/34 computer system; the emphasis was on supporting the finance functions for the generation of financial reports as well as reports for the Central Bank. A real breakthrough at BOC was the implementation of the Letters of Credit process under the direction of Mr. Janaka de Silva, Corporate Advisor, and his team. Later, automation was extended to other areas such as generating telex messages to be dispatched to the correspondent banks etc., under the direction of Dr. R.B. Ekanayake, who was the Director, IT. The first ATMs were installed by HSBC bank at their premises at Sir Baron Jayatilleka Mawatha. But this was a single-location ATM; Sampath Bank was the first bank to install multi-point ATMs in the late 1980s.

Mobile telephony

Mr. Siri Samarakkody founded Celltel, Sri Lanka's first mobile telephone service around 1987.

Various private sector initiatives

The Computer Society of Sri Lanka (CSSL) was inaugurated in 1976. There were many private sector organizations operational during this period and some of these are as follows; Data Management Systems Ltd. (DMS) has provided ICT products and services since the late 1970s. Most of the larger companies such as IBM, ICL and Burroughs were represented in Sri Lanka in the early 1980s. As stated earlier, AMS Data Services Ltd (AMS), a service bureau operation headed by Mr. Chandi Wijesekara, undertook accountancy projects and work relating to tea auctions, etc. Dr. Maya Sittampalam Rainford commenced the Company "A to Z Computers" around this time. This Company initially developed software on coding sheets for customers in the UK. The software included software for Courts in the UK, ERP solutions, accounting software, software for gaming and also for cleaning services. Thereafter, a Burroughs computer was used. Dr. Gamini Wickramasinghe established Informatics in 1983 as a total turnkey solution company, offering hardware,

software, training and maintenance. Mr. Jagath Ranawaka started Jagath Robotics Pvt Ltd in 1985 and entered the areas of both computer hardware and software. In the early 1980s Metropolitan Computers was the monopoly supplier on banking equipment such as ledger cards and printers.

This was the ICT arena into which the Computer and Information Technology Council of Sri Lanka (CINTEC) entered.



THE APEX BODY STORY - CINTEC

THE BEGINNING

That first formal meeting

It was a hot and humid morning in September 1982. Dr. Mohan Munasinghe, the newly appointed Senior Energy Advisor to President J.R. Jayewardene entered the Presidential Secretariat for his first weekly meeting with the President. The Presidential Secretariat was in the Old Parliament building facing the Galle Face Green and the Indian ocean. The security staff opened the imposing gates for Dr. Munasinghe's official vehicle. After getting down, he climbed the flight of broad steps at the entrance of the building, with its beautiful architecture and imposing colonnades. This building, which had been declared open in January 1930, housed the Legislative Council of Ceylon until the legislature was moved to the new Parliament in Sri Jayewardenepura, Kotte in 1982.



The old Parliament building

Dr. Munasinghe had weekly meetings with President Jayewardene. These meetings were scheduled just before the meetings of the National Security Council. The members of this Council who were waiting outside as Dr. Munasinghe arrived for his first meeting, looked at the youthful 37-year-old with great interest. During this period all of Dr. Munasinghe's work was focused on energy, so he had a 3-page memo on that topic ready for the discussion.

The President was seated at the far end of his office with his usual impassive demeanor, but with an inscrutable smile.

The President took the memo and glanced through it briefly, as Dr. Munasinghe watched him closely. President Jayewardene handed back the memo to Dr. Munasinghe and requested him to condense the document into a $\frac{1}{2}$ page memo with the

recommendations in two lines, at the end of the document. The President expected the summarized document to be ready in a few days. But Dr. Munasinghe went back quickly to his office and promptly edited the document. He used his bulky Tandy Radio Shack TRS 80 micro-computer – with only 45K memory - and took a printout of the ½ page memo using his EPSON tractor feed dot matrix printer (both were new to Sri Lanka at this time). There were no laptops or laser printers then. Dr. Munasinghe returned with the document in the style and format required by the President, within ½ hour.



*Tandy Radio Shack TRS 80 micro-computer
www.wikipedia.org*

The President was thoroughly impressed with the speed with which the document had been edited. “*Your Secretary must be really efficient*”! he said. Dr. Munasinghe explained that he had used his micro-computer to edit the document and then used a printer. This triggered immediate interest. At subsequent weekly meetings, the President kept asking about computers. Then in late 1982, the President said “we should know more about this technology, so will you write me a note on this?” This was the beginning of a long journey, which led to the setting up of the Computer and Information Technology Council (CINTEC) of Sri Lanka, and ultimately two decades later its successor, the Information and Communication Technology Agency (ICTA) of Sri Lanka.

Dr. Munasinghe wrote a brief note wherein he recommended that a computer policy should be developed. The word “policy” resonated, because Dr. Munasinghe had just outlined the integrated national energy policy for Sri Lanka.

A Computer Policy Emerges

When President J.R. Jayewardene requested a longer report as the next step, Dr. Munasinghe realized that he could not do it himself. He informed the President that he was

not an expert in this arena and advised the President that there were many others who would be more suitable than he was. Some names that immediately came to his mind were those of Prof. V.K. Samaranyake, Dr. Abhaya Induruwa and Prof. J. A. Gunewardena. But the President wanted Dr. Munasinghe to chair and be in charge of this new venture. It was consequently agreed that a Committee would be formed. This resulted in the setting up of the Special Presidential Committee on National Computer Policy, and that is how Government involvement in the area of ICT commenced.

The Natural Resources, Energy and Science Authority (NARESA) provided the institutional framework for setting up the Presidential Committee on National Computer Policy (COMPOL). The Committee consisted of eminent members with extensive experience and expertise. One very important consideration that shaped this Committee was that those in charge of drafting the computer policy should have a broad outlook. This was reflected in those who became members of the Committee. In addition to Dr. Munasinghe (as Chairman), the other members were Prof. V.K. Samaranyake from the University of Colombo, Dr. R.B. Ekanayake of the Computer Society of Sri Lanka, Dr. N.W.N. Jayasiri from the National Institute of Business Management

(NIBM), Prof. Sam Karunaratne from the University of Moratuwa and Dr. Ajit Kanagasunderam from the Central Bank of Sri Lanka. Mr. N.U. Yapa from NARESA was the Secretary.

The Committee started writing the report. They met either at the office set up in Dr. Munasinghe's home, or in the office of the Senior Energy Advisor at the Ministry of Power and Energy. The Committee completed the report within four months and handed over the report to the President, with no fanfare.



Handing over the COMPOL report to the President

It was possible to complete the work quickly due to the high professional quality of the Committee and the excellent teamwork. The resultant policy document was approved by the Cabinet in 1983, and it stood the test of time. For over 20 years, this was the only Cabinet approved ICT policy in Sri Lanka.

This very first computer policy was not a “controlling” policy. The President was interested in development. Therefore, the objectives of the policy dovetailed with this viewpoint that the needs of the country be addressed from a developmental perspective. The emphasis was on facilitation and the use of ICT for development – i.e., “to use computer technology in all its aspects, for the benefit of the people of Sri Lanka, and to further the socio-economic development of the nation”. This language was notably farsighted in a scientific document, well before concepts like sustainable development became fashionable. First, the developmental needs of the country were identified and then the way in which technology could be used for development was ascertained. The general philosophy underlying the National Computer Policy Guidelines was specifically stated as “to foster initiative and creativity in both public and private sectors, and to coordinate, encourage and guide these efforts rather than to control and regulate them”.

Then during the Sinhala/Tamil New Year period in April that year, Dr. Munasinghe met the President, incidentally while both were in Nuwara Eliya. This meeting was at the President's House on the morning of 14th April. The President was relaxing in the garden with Mrs. Jayewardene. The President offered Dr. Munasinghe some *kiribath* and then went on to inform him that the COMPOL recommendations should be implemented as soon as possible. Discussions were held on the way in which this should be carried out. Such was the relaxed atmosphere in which a momentous decision was made -- a significant milestone in the history of ICT development in Sri Lanka.

The very first computer Act in Sri Lanka; the Computer and Information Technology Act no. 10 of 1984

Drawing on the COMPOL report, Dr. Munasinghe helped the Legal Draftsman's Office to prepare the proposed legislation. In November 1983, he informed the President that the Legal Draftsman's Office had transmitted the final draft to him, and that it was consistent with the directions given by the President and the Cabinet, based on the recommendations contained in the original report prepared by the Presidential

Committee on National Computer Policy. The draft also incorporated several amendments suggested by the Minister of Education. This Act was broadly focused on the formulation and implementation of policy for supporting national development. Some of its key objectives were to advise the Minister on the formulation and implementation of a national policy on computers and IT and also to promote, facilitate and assist the use of and application of computers and IT in Sri Lanka with a view to improving the quality of life of its people and enabling Sri Lanka to acquire the necessary capability to meet the challenge of technological change. Dr. Munasinghe who also served on the Presidential Committee on Telecommunications Policy, was able to incorporate relevant ideas from that exercise into the CINTEC Act.

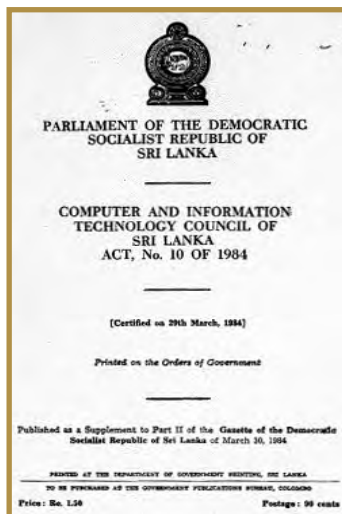
The first ICT Government Apex Body

President J.R. Jayewardene announced the setting up of CINTEC at the convocation ceremony of the University of Sri Jayewardenepura on 25th February 1984. This was also the 25th Anniversary of the founding of the University. At this ceremony the President addressed the graduands: “Science and Technology must be an essential part of development. It has to be part of upbringing from the cradle.... we are

in the process of establishing a Computer and Information Technology Council.....the microchip is today the carrier of knowledge.... the need to leapfrog into the future is paramount in the life of a developing nation.... Time is of essence. The time is now, and we must grasp it. You, young men and women of the future will be the beneficiaries.”

Through the “Cabinet Memorandum on the Computer and Information Technology Council” dated 20th February 1985, President J.R. Jayewardene stated the following:

The Computer and Information Technology Council Act no. 10 of 1984 was made effective on 1st May 1984 by Cabinet.



*The Computer and Information
Technology Council Act
no. 10 of 1984*

CINTEC thus came into being. The President had already appointed Dr. Munasinghe as Chairman of CINTEC on 11th May 1984. At the President's request, Dr. Munasinghe had previously nominated five senior persons to be considered for the chairmanship of CINTEC, professionally excluding his own name. Nevertheless, the President insisted on appointing Dr. Munasinghe as the Chairman. In the above Cabinet memo, the President also proposed a list of nominees from which nine members were to be selected to the Council under Article 4 of the CINTEC Act. He further stated therein that the nominees have been selected "on the basis of their coverage of relevant disciplines, long-run and balanced national viewpoint, interest in the work of CINTEC, wider knowledge and perspective, maturity and credibility, and ability to work together as a team".²

The members who were eventually appointed to this first Council were Mr. G. Cumaratunge (Commissioner of Customs), Dr. R.B. Ekanayake (President of the Computer Society of Sri Lanka), Mr. C. Gunasingham (Additional Secretary, Presidential Secretariat), Mr. K.K. Gunawardena (Director of Telecommunications), Prof. J. A. Gunawardena

² Source: Cabinet Memorandum on the Computer and Information Technology Council, 20th February 1985

(University of Peradeniya), Prof. Abhaya Induruwa (University of Moratuwa), Dr. N.W.N. Jayasiri (NIBM), Mr. Akiel Mohamed (Director of National Planning), and Prof. V.K. Samaranayake (University of Colombo). The professionalism and broad coverage of the Council (which included senior persons from Government, academia and civil society), helped to ensure its success. An all-encompassing principle in appointing Council members was that they should have a broad outlook. What is learnt in one sector should be of help in other sectors.



The first Council of CINTEC

Thus, the Computer and Information Technology Council of Sri Lanka (CINTEC), was established as the apex Government body on computers and ICT.

Positioning CINTEC directly under the President

An Apex body on ICT would be able to function more effectively, if it is positioned directly under the President. Responding to this suggestion, the President said “Please work it out with my secretary”. This was a difficult hurdle, since Mr. W.M.P.B. Menikdiwela, Secretary to the President, was a very experienced public servant, but unfamiliar with digital technology. Dr. Munasinghe argued: “Mr. Menikdiwela, I promise to handle all the technical aspects, but we would benefit greatly from the administrative guidance provided by the Presidential Secretariat”. Mr. Menikdiwela suggested that Mr. S.M.L. Marikkar, Additional Secretary be assigned to work on CINTEC matters. This formula was accepted and CINTEC began to function directly under the President. This helped to promote early computerization of the Presidential Secretariat, as well.

There were three elements which facilitated the work of CINTEC; firstly, as described earlier, there was the Board or the Council to advise the President (or the Minister in charge). Secondly, there was the CINTEC Secretariat which was the core of CINTEC and supported the work of the Council.

Thirdly, there were subject-specific Working Committees, Centers of Excellence, and private sector and professional groups. Decentralized implementation depended on these.

CINTEC was not meant to be a huge organization because a large body might have interfered unduly with the growth of digital technologies in the country. Therefore, there were only a few people recruited as staff. Then there were the Working Committees. Most of the work was carried out through the Working Committees, with members drawn from the Government sector, from the academia and the private sector. The Committees comprised those with expertise in relevant fields.

Working Committees are established

The CINTEC Act in Section 6, specifically gave power to the Council to “establish with the approval of the Minister, working committees to assist the Council in any aspect of its work, define the scope of work and authority of such committees and to appoint, with the approval of the Minister, persons to such committees”.

Dr. Mohan Munasinghe recommended to the President several names for three permanent Working Committees.

These were the Committee on Computer Education, the Committee on Computer Applications in the Public Sector and the Committee on Telecommunications and Data Transfer. These three committees are specifically mentioned in the COMPOL report. These committees were chaired by either the Chairman of CINTEC or a Board Member. Later there were other Working Committees which were established based on assessing the requirements in the ICT arena; there was the Working Committee on Law and Computers which had a very long lifespan - it was born in the mid-1980s and functioned until CINTEC was closed down in 2003. The Evidence (Special Provisions) Act no. 14 of 1995 on computer related evidence, resulted from the work carried out by this Committee. This Committee also commenced work on proposals for legislation on Computer Crime and Electronic Transactions. Prof. V.K. Samaranayake chaired this Committee throughout its lifespan.

The Working Committee on Telecommunication and Data Transfer chaired by Prof Abhaya Induruwa was largely responsible for leading the establishment of data communication infrastructure for academic and research and Internet in the country.

The Committee on Computer Applications in the Public Sector promoted the use of computers and computer applications for operational and decision-making work of several key Government organizations. Through this Committee, CINTEC played active roles in projects completed for several Government organizations such as the Presidential Secretariat, the Parliament of Sri Lanka, the Ministry of Foreign Affairs, and the Western Provincial Council. The Working Committee on Computer Education realized that there was a necessity for a State-recognized examination scheme on ICT. Therefore, it initially introduced the “National Examination in Computer Studies” and later the “National Examination in ICT (NEICT)”.

Then there was the Working Committee on Recommending Standards for using ICT in Sinhala and Tamil. This was an area of paramount importance, since the dividends of ICT could not be taken to the country-at-large only in English. It was imperative that using ICT in Sinhala and Tamil was enabled. This particular Committee too had a very long lifespan; it even functioned under another name under ICTA³ – viz. the Local Languages Working Group -

3 ICTA – Information and Communication Technology Agency of Sri Lanka (CINTEC’s successor)

even after CINTEC was closed down. The Committee on Telecommunications and Data Transfer evolved into the Internet Committee. Eventually the Fonts Committee was set up through the Internet Committee, towards the end of CINTEC's life.

The activities of these Working Committees led to achievements of significant and long-lasting national impact.

Centers of Excellence

Several academic and research organizations were identified as Centers of Excellence. There were, in the beginning, the Universities of Moratuwa, Colombo and Peradeniya, the Arthur C. Clarke Center for Modern Technologies (ACCMT) and the National Institute of Business Management (NIBM) for training. Dr. Munasinghe worked hard to successfully obtain foreign funding to support ICT development in these Centers -- e.g., Japanese financing for the University of Colombo.

Private sector and professionals

During the initial stages, Dr. Munasinghe also led meetings of major private sector and professional players at the time (including IBM, DMS, Wang and Bartleets, plus the fledgling Computer Society of Sri Lanka). This group which embodied the concept of “public private partnerships” - many decades before such buzzwords became fashionable - helped CINTEC develop strategies on how to make the country a leader in digital technology, using business as a key driver.

All these groups in the ICT arena were included and balanced through CINTEC. This was clearly depicted in the organizational chart. The key point was that one person or entity should not dominate the ICT arena. If this were to happen, it was envisaged that even funds could be diverted. CINTEC had to be above this and these aspects were clearly thought of, in the beginning.

International Profile and Linkages

CINTEC quickly established a high international profile as a role model for digital technology development in the developing countries. It broke new ground in setting out policies for harnessing ICT for national development.

Several expert training workshops and international conferences, as well as national meetings were organized. In the 1980s, several books were jointly published by CINTEC with renowned organizations such as the US National Academy of Sciences (Washington DC) and Third World Academy of Sciences (Trieste)⁴. These publications were widely disseminated worldwide, especially in the developing countries. Academics from the Centers of Excellence were also sent for conferences and courses abroad.

Another initiative promoted through CINTEC led to visits by high level executives from Motorola and Harris Semiconductors (two leading chip making firms at the time). They came to ascertain the prospects for setting up manufacturing plants in Sri Lanka. Potential sites were shown, and discussions were held with local infrastructure service suppliers (such as power and water), as well as Universities producing ICT graduates, to ensure an adequate supply of critical inputs. Financial incentives to foreign investors were also described in discussions with the Treasury. These efforts presaged the activities of the Board of Investment

⁴ Examples include: *Microcomputers for Development* by Mohan Munasinghe, Michael Dow and Jack Fritz (editors), CINTEC-US national Academy of Sciences, Colombo and Washington DC, 1985. *Computers and Informatics for Development* by Mohan Munasinghe (editor), CINTEC and the Third World Academy of Sciences, Colombo and Trieste, Butterworths Press, 1988.

of Sri Lanka (BOI) to attract foreign direct investments (FDI). Sadly, these plans never materialized; after the unrest in July 1983 these firms shifted their interest to countries such as Malaysia, which were also providing attractive FDI opportunities.

Business model

It was initially envisaged that CINTEC would be self-sustaining. CINTEC was to have a source of funds. In Section III of the CINTEC Act it is stated that “there shall be charged, levied and recovered on every computer and related equipment imported into Sri Lanka, a cess - a tax charged for this specific purpose - at such rate as maybe determined from time to time, by Parliament by resolution”. But this did not transpire.

Premises

For the first few months, CINTEC operated from the Ministry of Power and Energy, where Dr. Mohan Munasinghe already had established the office of the Senior Energy Advisor. Furthermore, Dr. Munasinghe’s office space in the Presidential Secretariat was too small, and it became necessary to find more permanent premises for

CINTEC. The bids received through a mini-tender were evaluated and the Bandaranaike Memorial International Conference Hall (BMICH) was selected as being the most suitable. There were facilities at the BMICH. There were telephone lines. The office rooms were furnished and cleaned daily. Tea was provided, if required. There were parking facilities. It was a convenient location. And there was a peaceful ambience throughout. Rooms 2-201, 2-201-A and Room 2-202 were initially selected for CINTEC. These were on the second floor.

Initial staff

The very first staff member to be recruited was Ms. Nishanthi de Silva. She was the Confidential Secretary to the Chairman. Another early employee was Mr. S.H.A.J. Kumara. He was at CINTEC until it closed and later, he was employed at ICTA -- CINTEC's successor. Kumara was "ubiquitous". He was in the Accounts Section but most staff members turned to him for assistance in many other areas. Then there were the Coordinating Officers: Mr. Abeywardena and Mr. Susantha Perera. Ms. Aberajini too joined this initial team as a Finance Assistant. Mr. Damith Gunatilake was an Office Assistant and Mr. Truman de Silva joined as a driver. Eventually Mr.

Silva joined CINTEC as the Administrative Officer and Ms. Indira Fernando too joined as a Confidential Secretary.



Initial CINTEC staff

The time had come to leave

Dr. Munasinghe was working at CINTEC but he was employed at the World Bank, Washington DC. He had taken leave without pay from the World Bank, thus interrupting a successful career as a manager, to serve voluntarily in Sri Lanka at President Jayewardene's request.

Initially, the President of the Bank had agreed to release Dr. Munasinghe for one year. But President Jayewardene persuaded the Bank to let Dr. Munasinghe continue for over three years in Colombo, citing the necessity of Dr. Munasinghe's work. From 1982 onwards, the time passed swiftly, and so once again Dr. Munasinghe had to remind the President in late 1985, that he had an obligation to return to Washington or lose his job there.

President Jayewardene's first reaction was to ask if Dr. Munasinghe might consider continuing to run the initiatives he had launched (in diverse areas such as energy, science and technology, forestry and water resources), remotely from the USA. Dr. Munasinghe realized that this was not possible. He thanked the President for the confidence placed in him, but advised him that there were people who were capable of taking over. Dr. Munasinghe then guaranteed that he would continue to be available for at least one more year (from Washington), to ensure the smooth functioning and continuation of the various key initiatives. The unstated point that neither raised was that President Jayewardene's own tenure would also be ending after 1986, and there was no guarantee that his successor would retain his senior appointees. In a personal letter to Mr. Clausen, the President

of the World Bank, President Jayewardene thanked him for making Dr. Munasinghe's services available to Sri Lanka, with special appreciation of Dr. Munasinghe's work in Sri Lanka.

One critical issue was the appointment of the Chairman of CINTEC. Through a short-list of three potential candidates for Chairman, Prof. V.K. Samaranayake was singled out to take on the Chairman's position. Dr. Munasinghe provided assurances that there would be a transition period during which he would ensure continuity, even after returning to USA. Eventually Prof. V.K. Samaranayake was confirmed by the President as the new Chairman of CINTEC.

True to his word, Dr. Munasinghe maintained his close relationship with the new Chairman and continued to provide advice from Washington for many years. Meanwhile, the Council of CINTEC took the unusual step of appointing Dr. Munasinghe as "Chairman Emeritus". On his periodic visits back to Sri Lanka, he never failed to renew his close links with CINTEC staff and even informally attended Board meetings. Many years later, the enduring friendship of over 40 years between these two ICT pioneers – Professor Munasinghe and Professor Samaranayake - was evident to

all, when the very first Vidya Jyothi Prof. V.K. Samaranayake memorial oration organized by the University of Colombo School of Computing, was delivered by Deshamanya Prof. Mohan Munasinghe at the University of Colombo, on June 5, 2008.

Prof. Samaranayake assumes Chairmanship

Prof. Samaranayake assumed duties. Then he realized that there was an immediate necessity for ICT awareness. In the mid-1980s computers were new in most Government organizations. Employees were wary. And there was wide-spread fear that computers and ICT might replace people's jobs resulting in unemployment. Professor Samaranayake met this challenge with alacrity and speed. He kept emphasizing that computers would not replace people. Indira and Nishanthi heard him worriedly say that there may be trade-union action against computerization. Secretaries and typists at this time were mostly using manual typewriters, and had to continuously strike hard on the keys resulting in many ergonomic problems. Use of Tipp-Ex, a brand of white correction fluid, was prevalent. In some organizations



people were painstakingly writing in books. In organizations which had micro-computers, only a few employees could use these. Others would look at it with a mix of awe and distrust.

These were the first fundamental issues that CINTEC, as the newly established Government Apex body on ICT, had to address and alleviate. CINTEC had to make users aware that they would be able to carry out their work easily, in a more efficient and effective manner by using computers. This would result in overall well-being and better performance. CINTEC even let it be known that there would be more attractive job titles for those who were then designated as “clerks” and “typists”.

Initially, Nishanthi and Indira started carrying out awareness programs for Secretaries and other typewriter users. CINTEC leased another room, 3G-18, which was on the ground floor of the BMICH. This was more spacious than the CINTEC office rooms on the second floor and it was equipped with computers. CINTEC organized 10-day programs and the participants were made aware of computer use for their day-to-day work and were also trained on using word processing software; during the 1980s WordStar was used. The participants were also given exercises and evaluated.

In 1986, Prof. Samaranayake decided that ICT should be taken to areas in the country away from Colombo. Access to computers and awareness on ICT was limited during this period to Colombo and its environs. People in remote, rural areas had no access to computers. Penetration of fixed telephone lines during this period was low. Even these were centered mainly in Colombo and its environs. There were no mobile phones. There were many in rural areas during this period who did not have access even to electricity from the national grid. The objective was to make sure that there was IT infrastructure available to most citizens of the country.

Obtaining a bus for CINTEC and converting it into a mobile computer unit was Prof. Samaranayake's idea. It was funded by the Petroleum Corporation. The bus seats were removed and the interior was equipped with networked BBC micro-computers. Educational software was given by the British Council. The bus visited schools, and other educational institutions in the provinces, in order to create awareness in ICT related aspects in these areas. The bus also visited the *Gam Udawa* exhibitions. This event was held annually throughout the country and was a major attraction. Consequently, people flocked to the mobile unit too at these events and there were specific programs, such as the

program on astrology which helped in inculcating people to computers.

CINTEC later leased more office rooms and a library with books on ICT was set up in Room 2-206. This was frequented mainly by undergraduates.

These were some of the early initiatives. Professor Samaranayake thus commenced his tenure at CINTEC and faced many vicissitudes and ups-and downs, over the years. His tenure spanned many years and ultimately, he was known by many as the “Father of ICT in Sri Lanka”.

Mr. Rohan N. Wijeratne and Prof K.K.Y.W. Perera also served as Chairman CINTEC during these early years, specifically in the early 1990s. On several occasions Prof. Abhaya Induruwa served as Acting Chairman. After two decades of active contribution to the ICT development in the country CINTEC was closed down and ICT Agency (ICTA) was established in 2003 as the lead agency for implementation of information and communications technology initiatives by the Government of Sri Lanka.



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