

INTERNATIONAL WORKSHOP ON NEW TECHNOLOGIES FOR RURAL TELECOMMUNICATION, NEW DELHI (INDIA), JULY 18-20, 1995

PARTICIPATING COUNTRIES : 14

NUMBER OF PARTICIPANTS : 20

The Centre organized a 3-day International Workshop on New Technologies for Rural Telecommunication in New Delhi, India during July 18-20, 1995. The Asia Pacific Telecommunity (APT), Bangkok and the Third World Academy of Sciences (TWAS) supported this event. Asian and Pacific Centre for Transfer of Technology (APCTT) sponsored participation of DPR Korea. Government of India Departments of Telecommunications and Scientific & Industrial Research also provided assistance for the Workshop.

The Workshop was attended by one representative each from the member countries of the NAM S&T Centre, respectively, Afghanistan (Mr. Mohammad Jalil, Director General, Ministry of Communication), Bangladesh (Mr. Shafiqul Islam, Ministry of Post & Telecommunication), Bhutan (Mr. Sangay Dorji, Ministry of Communication), Burkina Faso (Mr. Tassere Felix Compaore, National Office of Telecommunications), Egypt (Dr. Said H. Hefnawi, National Research Centre, El Dokki), Malaysia (Mr. Mohd. Taib Hassan, Telekom Malaysia Bernad), Nepal (Mr. Babu Kaji Shakyi, Nepal Telecommunication Corporation), Pakistan (Mr. Mohd. Bashir Ahmed, National Institute of Electronics, Islamabad), Sri Lanka (Mr. R. B. Kumarapathirana, Sri Lanka Telecom Corporation, Colombo), Tanzania (Prof. Henry Robert Mgombelo, University of Dar-es-salaam), Uganda (Mr. Edmund Bukonya, Uganda Post & Telecommunication Corporation), Vietnam (Mr. Nguyen Ba Hoan, Institute of Post and Telecommunication), two representatives from DPR Korea (Mr. Li Chol Song and Mr. Chon In Chol, State Commission for Science and Technology) and six participants from India, respectively, Dr. S. K. Sarkar and Dr. M. V. S. N. Prasad of the National Physical Laboratory (NPL), Delhi, Dr. T. K. Bandopadhyay of Central Glass & Ceramic Research Institute (CGCRI), Calcutta, Mr. T. S. Ramnath of Shyam Telecom Ltd., New Delhi, Mr. D. V. Singh of the Department of Electronics, Government of India and Mr. Lt. Col. Om Vir Singh of the Defence Research and Development Organisation. Fiji, Peru and Zambia, who had nominated their representative, could not attend.

Prof. V.S. Ramamurthy, Vice-President of the Governing Council of the Centre and Secretary to the Government of India in the Department of Science and Technology presided over the inaugural session and called for a strong policy commitment on part of the policy makers in the developing countries and development of a cost-effective technology on part of the scientists and technologists which only could make a success of the rural telecommunication programme. Mr. R.K. Takkar, Chairman, Indian Telecom Commission in his inaugural address stated that there are 600,000 villages in India out of which only one-third are connected at present. The expansion of telecom so far in India was

demand-driven and thus the rural sector was neglected, but it has now set a very ambitious target of providing at least one telephone in each village in 21 months from now. Mr. Hioryasu Sonoki, Executive Director, Asia Pacific Telecommunity (APT), Bangkok and a special invitee to the Workshop stated that leave alone the rural sector, even the metropolitan areas in developing countries do not have a proper communication system. The Asia Pacific region has about 3.3 billion people and even a one-percent increase in the telecom facilities will mean an investment of US \$100 billion. Improving and bridging the gap is no easy task as the telecom sector is asked to generate its own funds. The advent of Satcom and optical fiber technology will however make this task easier. Mr. A. Parthasarathy, Additional Secretary, Department of Scientific & Industrial Research, Government of India gave an account of the developments over the years in telecommunication technology in general and rural telecommunication technology in particular, and how the advances in semiconductor technology; computers, space technology etc. in the last decade have contributed to these dramatic changes. Dwelling on the unsuitability of western technology for developing countries, Mr. Parthasarathy referred to the efforts made in India to develop low cost and rugged switching systems such as RAX 7 Milt, transmission systems such as 2/15 subscriber radio systems and VSATs which are now in operation in 15,000 digital rural exchanges in India and have also been exported to Vietnam, Bangladesh, Nigeria, Yemen, Nepal & Namibia. Experts from the Indian Department of Telecommunication (DoT), Mahanagar Telephone Nigam Ltd. (MTNL), Centre for Development of Telematics (C-DoT), National Physical Laboratory (NPL) and Central Glass and Ceramics Research Institute (CGCRI) of the Indian Council of Scientific & Industrial Research and Mr. Shunya Itami of the Japanese Telecom Department served on the workshop faculty.

Apart from the inaugural session, there were 22 presentations at various technical sessions followed by a concluding session. The main workshop programme started with the keynote address by Mr. P.S. Saran, Member of the Indian Telecom Commission. Dr. B.M. Reddy of the National Physical Laboratory, New Delhi covered the HF Band for Rural telecommunication. The technical sessions related to Rural Telecom Technology, Rural Transmission Technology, Rural Switching Systems, Technology Applications and Power Supplies including Photovoltaic, Planning and Human & Financial Resource for rural telecommunication. Mr. Mohd. Taib Hassan from Telekom Malaysia presented a case study of rural telecommunication in Malaysia. The total commitment for rural telecommunication in Malaysia is evident from the fact that during the sixth plan (91-95) of Malaysia an amount of US \$1.23 billion is earmarked for the purpose. Other participants also presented their country reports. Field visits were arranged to Central Electronics Limited, one of the major producers of photovoltaic panels for rural telecommunications and to a rural telecommunications equipment manufacturer.