

No. NHIII/Misc/129/74

Dated the 9th June, 1976

To

All Secretaries of the State
P.W.D.s, dealing with roads

Subject : Application of Network Techniques on Road Construction Projects

Please refer to the Ministry's letter of even number dated the 12th July, 1974 forwarding a note about the "Application of Network Techniques to Planning and Programming of Highway Construction" for your views.

2. Some of the States have expressed the following difficulties in this respect :
 - (i) Inadequate length of the sanctioned projects;
 - (ii) Non-applicability of Network Technique since the works are split up horizontally and vertically to utilise smaller contractors and local cooperatives;
 - (iii) Allotment of inadequate funds;
 - (iv) Unreliability as regards timely supply of materials; and
 - (v) Lack of trained people.
3. These difficulties are appreciated. However, it is felt that a beginning in the application of Network Techniques could still be made on some of the major projects. Our aforesaid letter mentioned that the optimal length of a blacktopping project for this purpose will be about 30 km where a project of this size stands already sanctioned even though in pieces, the State Public Works Department could examine whether for purpose of award of contract, the sub sections could not be clubbed into a single lot for more economic use of plant and machinery. If feasible, this should be done and the Network Methodology adopted. For future, it is proposed that estimates of a few major works (e.g. bypasses or approaches to major bridges) may be framed for requisite length so that Network Techniques could be utilised and a scientific time-bound programme established. This will ensure proper coordinated planning and gradually the Network Techniques could be availed of on other jobs as well.
4. The preparation and follow up of network Methodology does not require very specialised training. The Indian Roads Congress Special Publication No. 14 "A Manual for the Application of Critical Path Method to Highway Projects in India" (available on payment from the Indian Roads Congress, Jamnagar House, New Delhi. 11), is a comprehensive booklet and contains sufficient guidance. If it becomes necessary, however, a reference could be made to this Ministry. However the states may consider, deputing their Executive Engineers and Assistant Engineers to special courses on "Network technique" run every year by "Indian Institute of Public Administration, Indra prastha Estate, New Delhi.
5. It is hoped that it will be possible to make a beginning in this respect very shortly. For projects where it is found practicable to adopt this technique, it is requested that a copy of the C.P.M. charts prepared may please be sent to the Ministry as well as to the Regional Offices/Engineer Liaison Officer concerned for purposes reference, record and monitoring.