

No. RW/NHIII/P/10/84

Dated, the 3rd April, 1984

To

All Chief Secretaries of the States/Union Territories

Sub : Use of roughness measurements as an aid to more effective monitoring of road construction and maintenance operations

As you are aware, due to various reasons, enough attention has not been possible for the past several years towards the improvement and strengthening of roads in the country keeping in view the increase in traffic intensities as well as towards their maintenance requirements. This has resulted in serious deterioration in the condition of roads in various categories including National Highways, State Highways and other roads in the State sector. One of the factors which has undoubtedly contributed to this unsatisfactory situation has been the inadequate availability of funds both at the Centre as well as in the States, which in turn has been due to the extremely difficult position of overall resources within which the competing demands of many sectors of the economy have had to be met with. At the same time, it has been clearly established that despite the same or similar constraint of funds, there are vast inter-State and inter-unit variations in the condition of roads, thus highlighting the important role that supervision and monitoring obviously play in this context.

2. Another factor which recent studies have brought out is that the poor condition of roads is having an extremely adverse repercussion on user costs like wear and tear of vehicles and tyres, fuel consumption etc. According to the data brought up by the Road User Cost Study conducted recently by the Central Road Research Institute at the request of this Ministry, the poor condition of roads is resulting in an additional fuel consumption in the country of as much as 15%. Considering that the road transport sector is one of the major users of petroleum-based energy in the country, this order of loss on fuel on account of poor road conditions is indeed a matter of grave concern.

3. In the above context, it is obvious, therefore, that all out efforts have to be made to improve the condition of roads in the country both by increasing the allocation of funds to the maximum extent possible and also by ensuring at the same time the most optimum utilisation of these funds through a more effective monitoring of road construction and maintenance operations.

4. In order to achieve better monitoring and greater accountability in road construction and maintenance operations, it has been decided by the Govt. of India that as far as National Highways are concerned, immediate arrangements will be made for the use of Roughometers (also known as Bump Integrators) during inspections so that the degree of roughness of the road stretch concerned is quantified on an electromagnetic counter which is fitted in this machine. Officials of the State and the Central Govt. concerned with the construction and maintenance of National Highways would be expected to draw up a schedule of inspection of different divisions and units and while on inspection make a surprise check of randomly selected stretches of roads with the help of the Roughometer. If during these inspections, the degree of roughness of the road stretch concerned is found to be substantially lower than that of road stretches in other divisions or units with comparable constraint of funds and other comparable parameters like the time interval since the last renewal etc., it would be treated as a fit case in which the contractors and the officials concerned should not only be asked to improve their performance but also explain why this situation was allowed to develop.

5. The Roughometers are now being indigenously manufactured in India and cost only about Rs. 30,000/-. One instrument can measure about 100 kms per day. It is desired that to begin with each State may purchase

5100/18

one or two Roughometers (depending on the kilometrage involved) for use on National Highways out of the provision under T & P head of Account. Proposals in this regard may be sent to the Ministry at an early date. A copy of the detailed instructions issued in this regard may also please be sent to this Ministry.

6. As far as State Sector roads are concerned, the arrangements postulated in respect of National Highways as indicated in this letter may be treated as guidelines from the Centre which the State Govts. may consider adopting subject to such modifications as they may like to make.